CEYLON

ANCIENT AND MODERN

A GENERAL DESCRIPTION OF THE ISLAND,
HISTORICAL PHYSICAL, STATISTICAL

AN OFFICER
LATE OF THE CEYLON RIFLES

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By
AN OFFICER, LATE OF THE CEYLON RIFLES

IN TWO VOLUMES

VOL. I

WITH A MAP

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A

GENERAL DESCRIPTION OF THE ISLAND HISTORICAL, PHYSICAL, STATISTICAL.

CONTAINING THE MOST RECENT INFORMATION.

BY

AN OFFICER, LATE OF THE CEYLON RIFLES.

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VOL. I.

WITH A MAP.

LONDON:
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1876.

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PREFACE.

The only comprehensive work on Ceylon yet published is the apparently exhaustive account by the late Sir Emerson Tennent. The speculation as to Sumatra, or rather the Archipelago, and Ceylon having been formerly united, and that the island is not a dismembered part of the peninsula of India, brought forward by him, founded on the difference between the fauna of Ceylon and India, has been the subject of some discussion among naturalists. Dr. Falconer has shown that there is no radical difference in structure between the elephant of Ceylon or Sumatra, and that of India, as stated by Professor Schlegel (*vide* chaps. iii and xxiv), and the number of fauna supposed to be peculiar to Ceylon is now found to be less than was imagined. This question, principally put forth by Sir E. Tennent in his "Natural History of Ceylon," a separate work published after the other in 1861, together with recent speculations concerning the great south-eastern continent of which Ceylon is supposed to have formed a part, and the affinity believed to exist between the Australian aborigines and the hill tribes of India (*vide* chaps. iii and vii), of whom the Veddahs of Ceylon are a portion, necessitates, among other reasons, a new work on the island.

One of Sir E. Tennent's mistakes is the theory that "Galle was the ancient emporium of the foreign trade of Ceylon, the chief rendezvous of Chinese junks, and the

Kalah of the Arabs, where the Arabians in the time of Haroun-al-Rasched met the junks of the Chinese."[1] There is no allusion in any Arabian writer that their mariners met Chinese junks at Kalah, and this port, of some importance in the middle ages, is placed by all the Arabian geographers in the Archipelago. (*Vide* ch. x. 220—4.) The chief rendezvous of Chinese junks in the Indian seas were the ports of southern India. (*Vide* ch. x. p. 217 ; also ch. ix. pp. 169—173.)

Since Sir E. Tennent's work was published, in 1858, there have been some others, which help to throw more light on the subject, such as Khordadbah's "Book of Routes," translated by M. Meynard in the "Journal Asiatique" (1865), "Cathay, and the Way Thither," by Colonel Yule (1869), M. Pauthier's and Colonel Yule's editions of "Marco Polo," Lelewel's "Géographie du Moyen Age" (Bruxelles: 1858), and Sir Henry Elliot's "History of India" (1867).

Colonel Yule, in his "Cathay," remarks: "Sir E. Tennent has been led into the error of placing Kalah in Ceylon by relying too much on the statements of M. Reinaud, who, notwithstanding all his learning, in his notes to the 'Voyages Arabes,' only makes the text more obscure." M. Reinaud seems in several instances to have added words which are not in the original text of the Abbé Renaudot. (*Vide* ch. iv. p. 54, and ch. x. pp. 218—224, where Sir E. Tennent appears to have been again misled by him.)

The importance of Galle as a sea-port dates from after the arrival of the Portuguese, and it is not improbable that the name is derived from "gallo," the Portuguese for a cock. They fancied there was some connection between the name of this bird and the Sinhalese, whom they called Chingallas. Some years ago there was a figure of a cock sculptured on a building in Galle, the work of either the Portuguese or Dutch. It may also be derived from "galla," the Sinhalese for rock,

[1] Vol. i., p. 589 et sequentia ; vol. ii., p. 99, 100. Ed. 1859.

the harbour being difficult of access from coral reefs. (*Vide* ch. i. p. 11.)

A chapter of this work is devoted to an elucidation of the route followed by the Chinese to and from the Euphrates and western India, and an inquiry whether they stopped at Ceylon on their way, as surmised by Sir E. Tennent.

Early Siṅhalese history is so uninteresting, only a few of the chief incidents will be noticed, as the establishment of Buddhism, which appears to have occurred about the middle of the third century B.C., and was probably the result of the great Buddhist synod held at the modern Patna in the reign of Asoka. Turnour's "Epitome" is the foundation upon which, with the aid of the "Chronicles," Knighton, Pridham, Sir E. Tennent, and others have developed into a more elaborate history;[1] but the subject is not interesting enough to repay the labour bestowed on it; besides, the inveterate strain of exaggeration which runs through the Chronicles, renders them very unreliable documents to compile from. (*Vide* ch. vii. p. 135.)

Ample accounts of the Portuguese in Ceylon and eastern seas are found in the pages of their numerous historians, among whom Juan, or João de Barros, holds the first place. He was custodian of the Portuguese records of India, "Feitor da casa da India e mina," from which he compiled a very voluminous work, but lived to publish only the three first "Decades," dying in 1570. His work was continued by Diego de Couto down to 1596. The first Decade was published in 1552, entitled "Da Asia dos feitos que os Portuguezes." De Barros never was in India, but De Couto went there in 1556. [Besides his history, De Barros was author of several works descriptive of India.]

Castanheda Lopes' "History of the Indies," published at Coimbra (1551), was one of the earliest accounts. An English

[1] Knighton, "Ceylon," 1845; Pridham, 1849.

translation by Lichfield was printed in London, 1582. This work ends with the year 1525.

"The Portuguese Asia," by Faria y Souza, is a posthumous work in Spanish, recording events from 1497 to 1649, published at Lisbon, 1666. It has been translated by Capt. J Stevens, London, 1695.

"The Historia General de la India Oriental," by F. Ant. de San Romano y Rivadeneyra, a Benedictine monk of Valladolid, contains a full account of the wars of the Portuguese down to 1557, published in 1603.

Antonio Galvano's "Discoveries of the World" gives a concise account of the early voyages of the Portuguese and Spaniards, east and west. The author went to India in 1527. His work is printed in Hakluyt's collection, and a new translation was made in 1862 for the Hakluyt Society, from an original MS., by Admiral Bethune.

The Academia das Sciencias de Lisboa has latterly brought to light a number of valuable materials previously inedited from the archives of Portugal, the most recent being Gaspar Correa's "Lendas da India," published in 1858 in the "Collecção de monumentos ineditos para a historia das conquistas dos Portuguezes em Africa, Asia e America." The Lendas is chiefly descriptive of Da Gama's voyages to India. Correa's "Historia da India em quatro tomos," from 1497 to 1550 has not yet been printed. The fifth volume of the "Collecção de noticias para a historia e geografia das naçoes ultramarinas," published in 1836, contains Capt. John Ribeyro or Ribiero's History of Ceylon, presented to Don Pedro II., king of Portugal in 1685, entitled "Fatalidade historica da ilha de Ceilão, escrita pelo Capitão João Ribiero, dedicada à Magestade D. Pedro II." This work was previously known through a French translation, with notes, by the Abbé Le Grand, published at Trevoux, 1707, and also printed in the "Journal des Savans" (vol. xxix). The Portuguese editor points out that M. Le Grand not only altered the sense of numerous passages, owing

to his imperfect knowledge of the Portuguese language, but omitted whole chapters in the second and third books.

Ribeyro, speaking of the exports from Ceylon, says, 1000 boat-loads of areca-nuts were collected every year in the kingdom of Cotta, "Do Reino da Cotta se tirão todos os annos até mil champanas (que são como sumacas de quarenta toneladas) de *Aréca*," which M. Le Grand has rendered, "*un certain sable* dont on fait un très grand débit dans toutes les Indes," (p. 6). Sir E. Tennent suggests that by a clerical error the word *arena* (sand) may have been substituted for *aréca*. "*Arêa*" is the Portuguese for sand, not *arena*, which is Latin.

Ribeyro went to India with the Viceroy Conde de Aviera Tello, in 1640, and served in Ceylon during the war with the Dutch, being taken prisoner at Jaffna in 1658, and sent to Batavia. His work is the best Portuguese account of the island. An English translation from the French version was published with an appendix, by Geo. Lee, of Ceylon, 1848.

An account of the island and the war in the Oovah country, in 1630, was written by Rodrigues de Saa, son of a Portuguese governor, who was killed on the occasion, entitled "Rebelion de Ceylon y los progressos de su conquista en el Governo de Constantino de Saa y Noroña. Escribela su hijo Juan Rodriguez de Saa y Menezes, y dedicada a la Virgen Nuestra Senora Madre de Misericordias, Lisboa, 1681." This book has a curious dedication preface, "A Nuestra Sagrada Magestad, O Virgen Madre de Dios, Reyna de los Angeles."

J. P. Maffeis "Historia Indicarum," was written under royal authority and published at Cologne, 1589. A French translation appeared at Paris, 1665, and an Italian at Florence, 1589. Two Jesuits, F. Cardim, a Portuguese, and F. Barretto, wrote a "Rélation de ce qui s'est passé depuis quelques années jusques à l'an 1664 au Japon à la Cochin Chine au Malabar, en l'isle de Ceilan, etc." Paris, 1664. The second

part, by Barretto, contains some details about the pearl fishery, not to be found elsewhere.

Jerome Osorio, bishop of Sylves in Portugal, has given a Latin history of the reign of Emanuel, "De Rebus Emanuelis, Regis Lusitaniæ," 1752, translated by Gibbs, London, 1752. "The Tohfut-ul-Mujahideen," written by Sheikh Zeen-ud-deen, translated by Lieut. Rawlinson, gives a Moorish version of their wars against the Portuguese, from 1498 to 1581. Zeen-ud-deen lived about the time of Ferischta, 1579, who gives his account of the settlement of the Mahometans in India.

A very detailed and fair account of the Dutch conquest of Ceylon was written by Baldæus, a Calvinist minister, who accompanied their army, and was an eye-witness of the events he describes, entitled "Beschryving der oost-Indischen Landscapen, Malabar, Coromandel, Ceylon," Amsterdam, 1672; translated in Churchill's Coll. Voy., 1704.

The fifth volume of Valentyn's great work, "Oud en nieun oost-Indien," Amsterdam, 1726, contains a general account of Ceylon and the Dutch administration, with reports from their governors on the island during their rule, and is the best Dutch description, although much of it appears to have been taken from Knox and Baldæus. It has never been printed in any other language, except those parts translated into French in the seventeenth volume of Prevost's "Hist. des Voy.," Amsterdam, 1763, which gives a general history of the Dutch possessions in the East Indies from 1602 to 1760. Sir E. Tennent says, "that part of Valentyn relating to Ceylon was translated by order of Sir A. Johnson, and is among the MS. of the Royal Asiatic Society." The value of the official documents given by Valentyn is lessened from the fact that they were falsified to deceive the home government. (*Vide* Lord Valentia's Travels, i. 290.)

An account of the war between the Dutch and Portuguese is given by John Jacob Saars, entitled "Oost Indianische

funfzehn jahrige kriegs deenst," Nuremberg, 1672; or, Fifteen years' military service in India, from 1644 to 1659. The author was in the Dutch service at Batavia.

John Christopher Wolfs, in his "Reise nach Zeilon," Berlin, 1782, gives an account of Schreuder's war with Kandy. Sir E. Tennent, who calls him Jo. Christian Wolf in one place, and John Christopher in another (ii. 304), says, "he was a Dutch official at Jaffna, a native of Mecklenburg, and formerly chaplain to a Dutch East-Indiaman, who arrived in the island in 1750, where he remained for twenty years."

The "Asiatic Journal," for 1821, vols. xi. xii., old series, contains a translation of a memoir on the Dutch rule, written in 1809 by M. Burnard, a Swiss, high in their service, who was nearly forty years in the island. Another memoir on the same subject was written by M. J. Haafner, of Halle, also in the service of the Dutch East India Company at Batavia, published in 1806, translated into French, Paris, 1811. Haafner was known to Sir W. Jones. His travels on foot in Ceylon, "Rieze te voet door het eiland Ceilon," were published in Holland, 1810 and 1852.

Sir E. Tennent says, "the whole of the Portuguese and nearly all of the Dutch records of the island, which were obtained at the surrender to Britain in 1795, have since mouldered away or been destroyed by white ants; duplicates of the Dutch documents exist in the archive chambers in Holland, and some of the Portuguese despatches relative to India are among the MS. of the British Museum, No. 20,861." A volume of Dutch surveys of harbours and coasts, and plans for irrigation, were presented by Sir A. Johnson to the Roy. Asia. Soc.

The chief authorities on the British capture of the island are Captain Percival, who formed part of the expedition (his work was published in London, 1803); and Cordiner's "Ceylon," 1807. He was chaplain to the forces in the island from 1799 to 1804, and describes the colony during the first years of

occupation. Haafner, already mentioned, and C. F. Tombe, a captain du genie of the French army of Italy, who made a voyage to India and Batavia after the peace of Amiens, 1802; published at Paris, with notes by Sonnini, 1810. In the second volume he gives an account of the capture of Colombo, from a Dutch point of view, having obtained his information at Batavia from Dutch officers who had formed part of the garrison of Ceylon.

Since going to press the first stone of the proposed breakwater at Colombo, alluded to in Chapter IV., has been laid by His Royal Highness the Prince of Wales; when completed the largest of the steamers belonging to the Peninsular and Oriental company will be able to moor alongside it, and Colombo will become the principal seaport of Southern India.

H. S.

December, 1875.

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ERRATA.

Vol. 1, page 10, line 5, *for* Sarmatian *read* Samaritan.

,, page 188, line 14, *for* pestes *read* vestis.

,, page 192, line 3, *for* Dracontis in his "Carmen de Deo" *read* Avitus in his "De Initio Mundi."

,, page 194, line 31, *for* Macrobus *read* Macrobios.

,, page 241, *for* Sirat *read* Siraf.

Vol. 2, page 12, *for* Sarmatians *read* Samaritans; *for* Sarmatian *read* Samaritan.

,, page 123, line 1, *for* Megasthenes *read* Onesicrites.

,, page 237, line 26, *for* (Parag.) *read* (Temp.)

CEYLON

Scale of English Miles

10 5 0 10 20 30 40

Railways thus

81 82

9 8 7 6

Longitude East of Greenwich 80 81 82

Stanford's Geog.l Estab.t Charing Cross.

London: Chapman & Hall.

CEYLON,

ANCIENT AND MODERN.

CHAPTER I.

INTRODUCTORY CHAPTER.

Ancient Renown of Ceylon.—Few countries have had a more ancient or extended renown than the island of Ceylon, of whose Elysian charms ancients and moderns, Europeans and Asiatics, have alike written in terms of delight. From the earliest times a haze of romance has been thrown around it in the legends of the Hindus as the scene of the "Ramayana," one of the oldest epic poems in existence, which describes a war as famous in the East as that of Troy in the West.

To the Greeks and Romans it was known as the mother of the most stately of elephants,[1] the land of the sapphire and the hyacinth, the ruby and the pearl; an island, according to Pliny,[2] about which many fabulous stories were circulated. The Chinese called it "the island of gems," the Hindu poets "the pearl on the brow of India," and the Persians ".the island of rubies."[3] To the natives of the burning sands of Arabia, the arid and stifling coasts of the Red Sea, Persian Gulf, and many parts of India, the aspect of Ceylon as it rises from the sea—its lofty mountains and shores clothed to the water's edge with the brilliant and luxuriant vegetation of the tropics—must have been a delightful change.

[1] Dion. Periegetes, ver. 593; Hwen-Thsang.

[2] Lib. xxxii. 53.

[3] *Vide* ch. xi. Hamilton mentions that two Frenchmen were roasted alive by the Sirocco near Ormus, in 1722.—Pink. Coll. Voy., viii. 298.

Persian writers dazzle the reader's imagination with accounts of its productions, and rave of the delights of Serendib, where Adam and Eve consoled themselves for the loss of Paradise—a land flowing with milk and honey compared to the inhospitable and barren mountains of Persia.

Wassaf, a Persian poet, says it was so arranged by the Almighty, in order to break the force of a sudden change from the best to the worst; because if Adam had been expelled from Eden to a bad climate, it would have been the death of him.[1]

The Mahometans have many versions concerning the expulsion of our first parents from Eden. One legend states, that when they were cast down from Paradise, Adam fell on the island of Ceylon, and Eve near Jeddah, the port of Mecca; after a separation of two hundred years, Adam was conducted by the angel Gabriel to a mountain near Mecca, where he found his wife, thence called Arafat, and that they afterwards retired to Ceylon; others say Adam fell on the peak, and remained standing on one leg doing penance for a number of years. (Note, Sale's Koran, ch. ii.) Some say when the expulsion took place Iblis, or Satan, was sent to Moultan, the serpent to Ispahan, Adam to Ceylon, and Eve to Jeddah. This is again varied by including the peacock, which was expelled on account of its pride in its splendid plumage, and sent to Hindustan.[2] It is uncertain whether the idea of placing Adam in Ceylon originated with the Mahometans or Christians; perhaps the earliest mention of it is found in Eutychius, Patriarch of Alexandria, A.D. 864.[3]

In succeeding ages writers and travellers from all climes who have visited its shores, with few exceptions, join in a

[1] Elliot, Hist. Ind., iii. 29.

[2] Mas'udi, trad. Defremery, i. 60.

[3] He says of Adam, "Cum ergo in dominum suum rebellassent, expulit ipsos e paradiso hora nona diei veneris, in quemdam e montibus Indiæ, collocatosque in terra jussit sobolem procreare quo multiplicarentur, et implerent terram. Congressus ergo est Adam cum Eva quæ concepisset peperit puerum et puellam." Migne, Série Grec. v. cxi. p. 910. *Vide* ch. on Adam's Peak, Roberts, Orien. Illus., p. 2. Lieut. Burnes mentions that the Turcomans believed that Adam lived in Ceylon.—Trav., p. 137. Some Orientalists consider Arabia Felix the Paradise or Garden of Delight.—Huet, Hist. of Com., i. 302.

chorus of praise of its natural attractions. The sides of its mountains were strewn with gems formed from the tears of Adam, and the air was perfumed with the odour of cinnamon. In the fourteenth century Marignolli, Legate of Pope Clement VI., who visited the island on his way from China, alludes to the mountain "opposite Paradise," and repeats the Mahometan belief in its proximity to heaven, which was only "about forty miles distant." Ribeyro says, "as Ceylon is the key of India, it appears as if God had taken pleasure in enriching it with the earth's choicest treasures."

The renown of Ceylon as it reached Europe in the seventeenth century, is quaintly summed up by Purchas, in his 'Pilgrimage:' "The heauens with their dewes, the ayre with a pleasant holesomenesse and fragrant freshnesse, the waters in their many riuers and fountaines, the earth diuersified in aspiring hills, lowly vales, equal and indifferent plaines, filled in her inward chambers with mettals and jewels, in her outward court and upper face stored with whole woods of the best cinnamon that the sunne seeth, besides fruits, oranges, leimons, etc., surmounting those of Spain; fowles and beasts both tame and wild, among which the elephant, honoured by a naturall acknowledgement of excellence of all other elephants in the world, these all have conspired and joined in common league to present unto Zeilon the chiefe of worldly treasures and pleasures with a long and healthful life in the inhabitants to enjoy them, no marvel then if sense and sensualitie have here stumbled on a Paradise."

It is difficult to account for many of these illusions. Its gems, with few exceptions, are of moderate value, and its pearls inferior to those of Bahyren, but its cinnamon and elephants stand unrivalled. The great attraction of the island is the luxuriant vegetation and romantic scenery of the interior.

Much of the romance connected with Ceylon may be traced to the Mahometans, improving on the Hindu accounts of Lanka, a mysterious region situated under the equator; some of the Persians, according to Albyrouni, inhabited Lanka with beings of an angelic nature, confounding it with the Fortunate

Isles, an imaginary abode of bliss in the Eastern seas.[1] Lanka and Ceylon are usually considered as one and the same, but most Hindu pundits do not identify the modern Ceylon with Lanka, or Maha Lanka, titles referring rather to the submerged southern continent of which Ceylon is supposed to be a remnant, and also included Sumatra, Malay, and the Maldives. The Hindus called the straits of Malacca Lanka Dwarna,[2] and the modern Malacca is probably derived from it. With others Lanka was more an imaginary than a real place, occupying the middle of the globe. The "Surya," a treatise on the sun, one of the five "Siddhantas," places the meridian in Lanka, and calls it the "diabolical Sala," the abode of demons, alluding to the daityas or aborigines. Barrow, the Sanskrit scholar, in a note to Gladwin's version of Abul Fazel's account of Hindu sciences, remarks:—"A very curious and useful conclusion follows, namely, that Lanka is not the island of Ceylon, as is generally supposed, but a place determined by the intersection of the equator and the meridian of Delhi, which answers to the southern part of the Maldives. There are many reasons for concluding Lanka a part of Taprobane, which was a very large island including the Maldives, that may have been since destroyed by inundation, &c."

Another romance connected with Ceylon is the fable of spicy breezes, so often found in poets, who appear to fancy, because the East produces spices, the air where they grow must necessarily be perfumed with them. Few travellers to the East ever mention it; of all those who have visited Ceylon there are only two who do so. Lord Valentia says he perceived a fragrant odour at sea which was wafted a distance of nine leagues on the eastern coast;[3] and Mandelsloe, a great romancer, speaks of whole forests of orange, lemon, and cinna-

[1] "Ils en ont fait une espèce de Paradis, et se sont imaginé que des êtres d'une nature angélique les habitaient. Albyrouni, Traité des Ères."—Géo. d'Aboulféda, p. ccxxiv. Reinaud remarks, "Les récits fabuleux des Indiens sur l'île de Ceylon se retrouvent pour le fond dans les écrits de l'ancienne Perse."—Géo. d'Aboulféda, p. ccxx. *Vide* Tennent, i. 2.

[2] Wilford, Asia. Res., x.; Williams' Sanskrit Dict.

[3] Travels, i. 264.

mon trees, which diffused their fragrance at a great distance out to sea.

The air in many parts of Ceylon is highly perfumed for miles, from plants and flowers, such as the lemon grass (*Andropogon*), which is quite overpowering, also the nilla (*Acanthaceæ*), with its odour of honey, and the coffee plantations, when in blossom, with their jessamine perfume, but little proceeds from cinnamon until the leaves are crushed in the hand.

The perfumes which have been mentioned, however, rarely extend out to sea, although there can be no doubt fragrant odours are occasionally wafted from tropical lands. Columbus thought he perceived sweet odours in the air when in the Antilles, four days before they saw the land; Sir Walter Raleigh fancied them on the coast of Carolina, and the Portuguese scented them near the Senegambia. More recent explorers in the Antilles have traced an odour of violets sometimes perceptible off the coast of Cuba, to a climbing plant,[1] a species of *Tetracera*, which diffuses its fragrance at night. Burnes says the plains of Peshawur are perfumed with violets and thyme.[2]

All the odours of Ceylon are not of a pleasant nature, on the south-eastern coast the blossoms of a tree called *Sterculia fœtida* diffuse an intolerable odour resembling dead animals, and a family of plants belonging to the order *Rubiaceæ*, have been named *Dysodidendron* by Dr. Gardner[3] in consequence of their offensive properties.

Pliny (xii. 42) writes about the spicy breezes of India and Arabia, saying, "when the sun reaches the meridian the entire peninsula exhales an indescribable perfume, which extends far out to sea." This kind of romance, which is as old as Ctesias, has been repeated by writers and poets in all ages; the Malayan breezes of western India are as famous with the Hindus as the Sabæan in the west.[4] Agatharchides (B.C. 104), writing of Sabia, says its very air is so perfumed with odours that the

[1] Poeppig, quoted by Sir E. Tennent, i. 2.
[2] Burnes' Cabool, ii. 60.
[3] Calcutta Jour., vii. 2.
[4] Wilford, Asia. Res., x. 146; Vincent, Com. of the Anc., p. 32.

natives are obliged to mitigate the fragrance by scents of an opposite tendency, as if nature could not support even pleasure in the extreme.

According to Mas'udi, Adam's body was covered with leaves of Paradise when he was cast down from it, which, becoming dry, were scattered by the winds over India, giving birth to all its aromatics. Athanasius accounts for the aromatics of India by the spicy breezes blowing from Paradise.[1]

Andreas Naugerius alludes to the Arabian air in the lines—

> Impositosque comæ ambrosios ut sentit odores,
> Quosque legit diti messe beatus Arabs.
>
> And caught the ambrosial odours of her hair,
> Rich as the breathings of Arabian air.
> *Moore's Anacreon*, Ode vi.

Ariosto ascribes the same charms to Cyprus ("Orlando Furioso," ch. xviii. 138), and Milton borrows from Diodorus Siculus (lib. iii. c. 46) "Paradise Lost," iv. 163.

Eastern Cosmogony.—An idea appears to have anciently prevailed that one part of the world was higher than any other, and that this point formed the centre, all the other portions of the earth circling round it with a lesser degree of height. On the top of this mountain was the Terrestrial Paradise, or Eden, and above it heaven. From this mysterious mountain, called Meru by the Brahmins, there flowed four rivers which watered the whole earth, an idea apparently borrowed from the Bible (Gen. ii. 10); however, Sir H. Rawlinson has recently ascertained that "Gan Eden," or the terrestrial paradise of the Hebrews, was in reality the vernacular title of the province of Babylonia, and the four rivers, the double branches of the Tigris and Euphrates.[2]

The inhabitants of most Eastern countries considered theirs to be the centre of the world.[3] The Jews fixed on Jerusalem, the Chaldeans on Babylon, Hwen Thsang on China. The Brahmins placed Meru in their central insular continent,

[1] Cathay, ii. 352.

[2] J. R. A. S., 1869, xxiii.

[3] Santarem, Cosmo, i. 197, 400; Reinaud, Géo. d'Aboulféda, ccxv.; Mém. sur l'Inde, pp. 389, 340, 357, 369.

called Jambu Dwipa, which, according to the Puránas,[1] means the whole of Asia, but the Buddhist writers confine the term to India. The Hindus say the Ganges falls from heaven on Meru; it is alluded to in the "Zend Avesta," and Ezekiel, xxviii. 14. Many placed it in the north, the Arabs in Serendib. M. Reinaud thought Adam's Peak and Meru identical. The idea is found in Cosmas, who makes the world an oblong plain with one great mountain in the centre, the chief object of his treatise on cosmography being to show that the earth was not spherical.

Pliny says many writers place in India the mount of Meru, sacred to Bacchus. Pliny evidently believed the world was round, but also speaks of it as being shaped like the seed or cone of a pine tree (ii. 65). This system of cosmogony was adopted by many mediæval geographers, who depict Adam and Eve on the top of a high mountain, with a tree and four rivers running down the sides. Even Columbus believed in the fanciful theory; half the globe he imagined to be truly spherical, but the other half resembled the stalk end of a pear, and formed the terrestrial paradise; this part he placed in America, at that time supposed to be the Eastern world.[2]

Buddhist Cosmogony differs little from that of the Brahmins. Maha Meru is also the centre of the Buddhist world, encircled by seven ranges of mountains, round them the heavenly bodies revolve, between the lowest range of mountains and an eighth external range, called Chakra Watta by the Siṉhalese, extends the salt ocean, in which are situated the islands and continents of the earth, the Chakra Watta being the hoop or band keeping the whole together. Colonel Yule[3] notices the strange parallel to the ideas of the Buddhists in Dante's Mountain of Purgatory, with its seven zones surrounded by the table-land of the Terrestrial Paradise, when he ascends through nine celestial spheres to the vision of Candida Rosa and the ineffable glory, "Paradisio," ch. xxii.

There is also a curious description of Paradise by Sir J.

[1] Wilson's Puranas, p. 167.
[2] Letter of Columbus to Queen Isabella, 1498. Plin. vi. 23.
[3] J. R. A. S., 1870.

Mandeville, evidently taken from Genesis (ii. 10). He says, "wise men say, it is the highest point of the earth, and it is so high it nearly touches the circle of the moon as the moon turns. It is so high the flood of Noah could not reach it, although it covered all the rest above and below. It has but one entrance, which is closed by a burning fire, and has a well in the middle, out of which issue four streams that run through different lands, one is called Phison, or the Ganges, another the Nile or Gyson, one the Tigris, and the fourth the Euphrates." It is a strange circumstance, how they could have imagined a paradise amid the snows of an elevated mountain.

The Sanskrit writers also speak of three great peaked islands, named the Isles of Iron, Silver, and Gold (Souvarna Dwipa), which Wilford thought referred to Ceylon, Sumatra, and Malacca.[1] The Souvarna Dwipa seems to be identical with the Fortunate Isle of the Greeks, "an island rich in gold, and the abode of happiness." Pliny says beyond the mouths of the Indus are the isles of Chryse and Argyre, whose soil is formed of gold and silver (vi. 23). Ptolemy's "Aurea Chersonesus and Argentea," and the Isles of Gold and Silver, which figure in many mediæval maps, are only reproductions of the same; and it seems to be a curious confirmation of Wilford's idea that Ptolemy should have placed his "Argentea Metropolis" in the north of Sumatra, which does not yield silver, nor Malacca either, but both places produced gold in large quantities.

In a map of the twelfth century, attributed, in a note appended, to St. Jerome, the isles of Chryse and Argyre are placed at the north of Taprobane, and Stephanus of Byzantium says the Silver Isle made part of Taprobane, which is one of Wilford's arguments that Taprobane meant Sumatra.

Some of the ancients placed the "Bona fortuna insula" at the Andaman Isles—not a very happy selection—and all sorts of equally queer places, eventually settling in the Canaries, where Ptolemy fixed his meridian. Mr. Major, in his "Life of Prince Henry of Portugal," quotes a learned treatise on this subject by the venerable Joaquim da Costa de Macedo, of

[1] Sacred Isles of the West.—Asia. Res., x. 140.

Lisbon, 1844, saying, "There has been a belief prevailing in every religion, from the earliest ages, that souls of the departed cannot enter into bliss without first crossing a river. The doctrine originated apparently in India . . . . from whence it spread to Greece and Egypt, and even to the Ashantees. . . . The habitations of the blest were eventually transformed into islands, and are supposed to have originated the idea of the 'Fortunate Isles.' The exact position lay where fancy dictated, until the discovery of the Canaries in the outlying ocean, which assigned to them a more definite geographical position. It is probable that the Phœnicians were the original discoverers of them. Strabo (lib. iii.) says 'the islands of the blest are not far from Mauritania.' Many of the illusions connected with them continued to exist until they were visited by the Portuguese on their voyages round the coasts of Africa, when their real nature was discovered."

They were known to the Arabian geographers; Edrisi calls them "the eternal islands," and mentions the peak. Abul Fazel confounds them with the island of Atalanta, supposed by the Greeks to have formerly existed in the Atlantic Ocean. He says, "the Greeks commenced their reckoning of the longitude from Khalidat, which were six islands in the west ocean now inundated."

A good account of Hindu cosmogony will be found in Baskar Acharya's treatise on the globe, written 800 years since, where the author confutes the ideas promulgated in the Puránas. (J. A. S. Beng., 1834, 504.)

Names of Ceylon and their Origin.—Ceylon has had more names bestowed on it than any other part of the globe, a curious circumstance, and very indicative of its high estimation and renown, and many learned disquisitions have been written on this subject. Probably one of the most ancient is the Brahmin Lanka, and its numerous variations, such as Maha Lanka, Sri Lanka, Sri Lake, Sakelan, Lanka-puri (the Malay name), Maha indra dipa, Lake, Lince, Lans, Lana, Iana. The ancient Sinhalese called the island Sinhala, from Singha, the Indian name for a lion, derived from the legendary history of Wijayo, the conqueror of Ceylon. The "Mahawanso,"

describing this event, says, after that the people and island were called Sinhala, Silan dwipa, or Sihale dwipa, meaning the descendants of a lion — hence came Serendib, the Arabian name, as old as the second century A.D., being found in the Sarmatian version of the Pentateuch (Gen. viii. 4.) This has been transformed into Sielediba, Serindives, Selin, Seilan, Syllen, Sillan, Celan, Zeilan, Ceilao, and Ceylon. Some suppose Seilan, the name given by Marco Polo, to be derived from Sila, the Malay or Javanese for a stone, in allusion to the gems of the island; but *Sila* or *Saila*, which is also Sanskrit, means rocky or stony rather than a gem, which is *ratna* and *mani*. Sila was an Arabian name for Japan.

Another ancient name is Nágadipa, or snake island, in allusion to the snake worship of the aborigines.[1] Marcian of Heraclea says "Taprobane, formerly called Palasimundæ, now Salice." Agathemerus has it, "formerly Simunda, but now Salice." Periplus makes it "Palæsimundi, formerly Taprobane.[2]" The Moors called it Tenarisim, or "island of delights;" the Tamils, Ilanare, "island kingdom."

Tragana, Trante, and Caphane occur in Portuguese maps—names of unknown derivation. Castanheda calls it Hibenaro, probably derived from Ytterenbenaro, a name, according to Antonio Galvano, given by the Moors.[3] Siledpa-Camar, Lanka Camar, Pertina, and Tuphana, occur in mediæval maps. Tuphana can be traced to Topazius, a name given by Alexander Polyhistor, a Greek writer (B.C. 80), because it produced the topaz.[4] Pertina is unknown. Hwen-Thsang says the island was originally called by the Chinese *Pa-ou-tchow*, from the quantity of gems found there, which M. Julien translates into Ratna dwipa, from the Sanskrit, meaning, "island of gems,"[5] probably the origin of the name of the town of Ratnapura, near Adam's Peak, where the gems most abound. Fa

[1] Mahaw., p. 43.

[2] Hudson, Geo. Vet., i. 35; Muller, Geo. Grec., ii. 500.

[3] Adm. Bethune's trans., p. 104; Colonel Yule's Polo, ii. 255; Williams' Dict., pp. 800, 1020.

[4] Muller, Frag. Hist. Grec., iii. 237.

[5] Mém. des Contrées Occidentales, i. 198, ii. 125.

Hian calls it Sinhala; among the other Chinese names are Singkala, Chi-too (Red Land), Sylan, &c.

M. Burnouf has devoted several pages of an article in the "Journal Asiatique," 1857, to an explanation of the derivation of Salike, a name given by Ptolemy, apparently a corruption of Siri Lanka. Sir W. Ousley points out that it may be from Sakelan, an ancient Arabian name for Serendib. Wilford[1] traces it to Sala, or Salamala, the Sinhalese name for Adam's Peak, probably derived from the Sanskrit *Saila*, or *Sila*, a rock.

Lanka, according to Burnouf, is derived from Laka, another Sanskrit word, meaning abundance, happiness, or one hundred thousand: and Lanka-dwipa means "the fortunate isle." But this derivation is more applicable to the Laccadives, a numerous group of islets on the western coast of India.

Portuguese authors trace the name of the Sinhalese, which they write "Chingallas," to Chin or China, and Gallas, a tribe of emigrants from India who united themselves with some Chinese shipwrecked on the coast of Ceylon; but there does not appear to be the least foundation for this idea.[2] Bochart traces it to Chingar, an Arab word, meaning a timid man, which is simply absurd.

The derivation of the Greek name Taprobane has given rise to much controversy, and many pages of fanciful conjectures have been written on this word alone. By some it is supposed to be derived from *Tamra* or *Tamba*, the Sanskrit and Hindu name for copper, *Tamra-varna* or *parna* meaning copper-coloured, alluding to the peculiar colour of the soil in many parts of Ceylon, which is one of the first things that attracts the eye of a stranger. Other writers think it means copper-coloured forests from the brown colour of the leaves, but there are no forests of this description in the island.

Lassen, in his "De Taprobana Insula Veter Cognomen Dissertatione," Bonn, 1842,[3] thinks Tamra-varna means "the great

[1] Asia. Res., x. viii. 399.

[2] Teixeira, p. 184; De Barros, dec. vi.

[3] Also Indische Alter., i. 200, note 3, iii. 211; Turnour, Epito., p. 78; 2nd Supp Vol. Sir W. Jones' Works, p. 835.

pond covered with the red lotus," the island being famous for its tanks which are covered with this favourite lily of the Buddhists: he also derives Palasimundæ from "Pali simanta," "the head of the sacred law," Ceylon being the centre of Buddhism. Lassen appears to have borrowed part of his idea from the "Travels of a Fakir in Ceylon," (Asia. Res. vol. v.), who speaks of a tank at Adam's Peak called the tank of Ravan or Roban, which joined to tapu (island) forms the word Tapuravan or Taprobane. Wilford thought Taprobane was derived from Tapu-ravana, or "the isle of Ravana," and Palæsimundi from a Malay name, *Pulo-samudra*, or "ocean isle," which is part of his argument in favour of Sumatra being the Taprobane of the Greeks; and Bochart has sought out two Hebrew words, *Taph-porvan*, or "golden coast," to explain the origin of the name.[1] Some of these conjectures were written before the "Mahawanso" was translated, which states clearly enough the meaning of Tambapanni in the account of Wijayo's landing (ch. vii.), "when himself and followers, exhausted by sea-sickness sat down on the ground, which staining the palms of their hands a copper hue, from this circumstance the island obtained the name."

Tambapanni seems to have been also used by the Brahmins to designate Ceylon, and the word, spelt exactly as it is in the "Mahawanso," is found in the Girnar inscription of Asoka, referring either to the island or a town and river so named flowing into the sea of Manaar near Tinnevilly.

Dr. Mac Vicar of Ceylon traces the modern name to Elu or Hela, the ancient language of the isle; hence Sela and Selan.[2]

[1] Asia. Res., x. 148; Bochart, Geo. Sacra, ii. ch. xxii.
[2] Ceylon R. A. S. Jour., i. 26.

CHAPTER II.

PHYSICAL GEOGRAPHY.

Ceylon lies between 5° 55′ and 9° 51′ of north latitude and 79° 41′ and 81° 54′ east longitude,[1] being 266 miles long from Point Pedro, the most northern extremity, to Dondra Head the most southern point, and 140½ miles in breadth at the widest part from Colombo to Sangemankand on the eastern coast, and comprises an area of 24,700 miles, or about one-sixth smaller than Ireland. Its shape has been compared to a pear or a pearl, which suggested to the Hindu poets the idea of calling it "the pendant Jewel of India," but the less imaginative Dutch thought it resembled a ham. Baldæus says "the figure of the island represents, according to Maffius, that of an egg, but, in my opinion, it resembles rather a Westphalia ham," from whence no doubt the Dutch fort near Jaffna has got the name of "Ham's heel."[2] The island is nearly joined to the south-

[1] The latitude, longitude, and size of the island given here are taken from the Colonial Office list for 1873, which differs from Sir E. Tennent, who makes it 271½ and 137½ miles.

[2] Chur. Coll. Voy., iii. 667. "Down to a recent period no British colony was more imperfectly surveyed, but since the publication of Arrowsmith's map, no dependency of the Crown is more richly provided in this particular. In the map of Schneider, the government engineer of 1813, two-thirds of the Kandyan kingdom are a blank; in the map of the Society for the Diffusion of Useful Knowledge, the rich districts of the Wanny and Nuvera Kalawa are marked as unknown regions. General Fraser, after devoting a lifetime to the labour, assisted by Colonel Skinner and Captain Galloway, has produced an unrivalled survey in minuteness and extent. The country being covered with dense jungle, composed of trees 100 feet high, from which here and there branches had to be cleared to give a sight of the signal-stations, the work was carried out under great discomfort and risk from jungle fever, and the officers were often abandoned by their native attendants unwilling to incur them. In 1845 a base-line 5¼ miles in length was measured in the cinnamon plantation of Kaderani, north of Columbo, its extremities being marked by two towers 100 feet high. An admirable chart of the western coast from Adam's Bridge to Dondra Head, has been

eastern extremity of the Indian peninsula by a reef of soft sandstone called Adam's Bridge, which projects at intervals above the sea. The nearest part of the peninsula to the island is Point Calamare, 35 miles from Point Pedro; it is about 60 miles distant at Adam's Bridge, and 150 miles from Colombo to Cape Comorin.

Gibbon[1] alludes to the exaggerated ideas of the size of Ceylon entertained by the ancients, and its having been generally confounded with Sumatra, but does not explain the cause, which seems to be traceable to the legends of the Brahmins, or to its having been mistaken for the Terra Australis, a great *terra incognita* or antipodal land, supposed from a very remote period, by geographers, to have existed in the southern parts of the world. (*Vide* ch. iii.). D'Anville thought the great dimensions assigned to the island proceeded from a wrong estimation of their measures;[2] and M. Gosselin was of opinion they confounded it with the peninsula of India.[3] Diodorus Siculus (44 B.C.), if the story of Jambulus be his work, is almost the only ancient author who has described its size with anything like accuracy, making it rather smaller, or 5000 stadia, about 635 miles in circumference.

That some report of the island's existence had reached "the west" before the time of Alexander the Great may be inferred from Pliny, who says it was the opinion that Taprobane was another world called "Antichthonum," but discovered to be an island about the time of Alexander. In the treatise called "De Mundo," supposed to have been written by Aristotle, Taprobane is stated to be not less than Britain; if this be his work, it is the earliest notice of the island on record. Aristotle

published by the East India Company from a survey in 1845, but information is wanted as to the eastern and north." Tennent, vol. i. The Portuguese and Dutch appear to have done nothing towards a survey of any part of the island beyond the coasts, and ascertaining its shape. Baldæus says they estimated it at 360 leagues in circumference, about one-third too much, and Ribeyro at 190 leagues, one-third too small. In a Dutch map in Churchill's Coll. Voy., 1704, the Mahavilla Ganga, Kalany, and Caltura rivers are all united, running right across the island, and the most northern point is placed in 10° 0′ north latitude.

[1] Decline and Fall, ch. xl. 61.

[2] Géog. Antiq. de l'Inde, Paris, 1778, pp. 148, 109.

[3] Géog. des Grecs, p. 136.

died (B.C. 322), about the same year as Alexander, while the information given by Megasthenes and Onesicrites, to whom the classical authors owe their first definite knowledge about it, was obtained twenty years after the hero's death. "De Mundo" is ascribed by some to Chrysippus the Stoic (B.C. 280 to 208).

Sir E. Tennent (vol. i. 550) represents Pliny as saying, "Taprobane was considered to be a continent down to his own time, an error which he was able to correct by information obtained from the ambassadors to Rome in the time of Claudius." In Bohn's Classics[1] this passage in Pliny is rendered "the arms and age of Alexander were the first to give satisfactory proof it was an island." M. Gosselin, in his "Géographie des Grecs" (p. 35), interprets it in the same sense. Hudson, also, says Pliny states it was known as an island at the time of Alexander, but that it was doubted to be one by Solinus, Mela, and Hipparchus, as our own island was doubted to be one until Agricola circumnavigated it.[2]

There is no trace of Ceylon in the world of Herodotus (B.C. 444) The first Geography in which it appears delineated is that of Eratosthenes (B.C. 276 to 196), under a triangular form, at the southern extremity of the Indian peninsula. No sign is observable in Eratosthenes that he had adopted the idea of "the great southern land," but, about fifty years later, Hipparchus, the father of Astronomy (B.C. 160 to 125), appears to have entertained it, for Pomponius Mela (A.D. 43), quotes as probable the opinion of Hipparchus that Ceylon was the commencement of the south-eastern continent.[3] Ptolemy (A.D. 139), and his contemporary Marin of Tyre adopted the idea, although they separated it from Ceylon, but joined Africa and China, making the Bay of Bengal a vast inland sea from which

[1] "Taprobana alterum orbem terrarum esse diu existimatum est antichthonum appellatione ut liqueret insulam esse Alexandri magni ætas resque præstitere." Plin. vi. 24; idem, Bohn trans. ii. 51.

[2] Geo. Vet., i. 97. A long disquisition on the ancient geography of Ceylon and the various names given to the island, by M. Bournouf, will be found in the Journal Asiatique for 1826, 1857.

[3] "Taprobana, inquit, aut grandis admodum insula aut prima pars orbis alterius Hipparcho dicitur."—P. Mela, lib. iii. 7, pp. 59, 63.

there was no outlet; it is doubtful if Ptolemy knew anything about Madagascar.

This system figures in many mediæval maps, being more or less defined in Abu-Rehan (A.D. 1030), Edrisi (A.D. 1154), and Abul Hassan, some joining Malacca to Madagascar as well, and calling this huge island "Comar Malai." In the map of Gauthier of Metz, thirteenth century, the term "l'Antichone ou l'alter orbis" is applied to a large southern land in the Indian Ocean.[1] More modern geographers fancied that a southern continent extending all round the pole was a necessary counterbalance to those in the north, as the southern hemisphere could not be all water. Friar Mauro (A.D. 1457), has a chain of islands called "Auster;" when Australia was discovered the name came to be applied to it, although it does not correspond to the idea. Australia appears to have been known to the Portuguese as early as 1542, and was visited by them in 1601, a few years before the Dutch, who have generally got the credit of the discovery.[2]

Dimensions assigned it by Greek and Roman Geographers. —Onesicrites, the pilot of Alexander's fleet, who accompanied Nearchus through the Persian Gulf (B.C. 320), assigned to Ceylon a dimension of 5000 stadia, between 500 and 600 geographical miles, and placed it twenty days' sail from India. An ambiguous statement in Strabo (lib. xv. 690), leads to the idea that Onesicrites visited the island himself, accounting for the length of the voyage from its having been made in a slow sailing vessel. M. Gosselin, in his "Recherches sur la Géographie des Grecs" (iii. 291), says that Onesicrites did visit Ceylon during a new voyage ordered by Alexander probably on this authority.

Eratosthenes represents the island as being of great extent and having a greater longitude than latitude, a position assigned to it in "De Mundo." Eratosthenes placed the most northern point in line with his southern parallel which passed through the "*Regio Cinnamomiferæ*" in Africa, corresponding to the modern 10th degree of north latitude, and, according to

[1] Santarem, Cosmo, ii. 253; Schœll, Hist. de la Lit. Grecque, ii. 316.

[2] Major, Life of Prince Henry; Des Brosses, Hist. des Voy.

Pliny, made the island 7000 stadia in longitude, and 5000 in latitude.[1]

Strabo (lib. ii. 130) states, that "Taprobane was not smaller than Britain," and (in lib. ii. 72) calls it a great island, seven days' sail from the southern part of India, extending, according to Eratosthenes, at least 5000 stadia towards Ethiopia.[2] In lib. ii. 114-118, he mentions that, according to some, Taprobane was placed so near the equator it could not be inhabited, as Greek geographers had an idea that below their "cinnamon parallel" the heat of the sun under the equator was too great to allow people to live. Sir E. Tennent (ii. 550) remarks, "that Strabo manifests irresolution in stating that Ceylon was an island," but it is not apparent in Gosselin's translation, the one quoted here.

Pliny says the island was supposed in former times to be twenty days' sail from the country of the Prassi, when the voyage was performed in bad Egyptian vessels made of papyrus, but latterly, in better constructed vessels, only seven days. M. Gosselin, in a note to Strabo, makes the very probable suggestion that ancient authors, when stating the number of days' sail Ceylon was from India, did not mean the distance from the nearest point of the continent, but from whatever port in India they sailed from; many of the ancients were under the impression that India was not a peninsula, and did not extend much below the mouths of the Ganges, the Prassi being situated on this river. Pliny may have imagined they were not very far from the sea-coast. Fa Hian (A.D. 399) mentions that he was fourteen days sailing from the Hoogley to Ceylon with a fair wind.

The Ambassadors to Claudius informed Pliny the coast of Ceylon opposite India extended 10,000 stadia in a south-easterly direction! We know so little of the actual lengths of the measures of the ancients, that we cannot form a very accurate idea from their figures; some make a geographical mile to contain 8 stadia, others 10. Strabo assigns 700 stadia to

[1] Nat. Hist. vi. 24.

[2] Strabo, lib. xv. p. 690, quotes Eratosthenes as making it 8000 stadia in length.

a degree, equal to $10\frac{2}{3}$ stadia. At 8 stadia to a mile, 5000 would make 625 miles.

Ptolemy, who should have had more accurate information than his predecessors, makes the island of greater dimension than any of them, assigning it, according to some calculations, 15 degrees of latitude, and extending the southern point below the equator. Artemidorus[1] of Ephesus, who travelled in the East B.C. 104, makes it 7000 stadia in longitude and 5000 in latitude; and C. J. Solinus[2] Polyhistor, third century A.D. 3423 stadia in length and 2440 in breadth, placing it in the Bay of Bengal, opposite the kingdom of Narsinga. Agathemerus[3] (A.D. 250) makes it larger than Albion, and Marcian of Heraclea[4] (A.D. 350) 9500 stadia one way and 7500 the other. "Periplus" expands the western coast towards Ethiopia, and Ælian (A.D. 260), apparently following Pliny, assigns it 7000 stadia of longitude and 5000 of latitude. Fa Hian is much nearer the actual size, but, like the Greek geographers, he reverses the position of the island, making it from east to west 50 *yeou yan* (61 leagues), and from north to south nearly 40 leagues. Cosmas reckons it to be about 900 miles each way, and five days' sail from the continent.

Down to the middle of the sixteenth century Ceylon retained its ancient reputation for size, Marco Polo (A.D. 1292) giving it a circumference of 2400 miles; the Florence map (A.D. 1417), and Friar Mauro (1457), a circumference of 3000 miles; and Porcacchi (1576), in his "Isolario," according to information obtained from the Moors, who extended the isle below the equator, makes the circumference 2500 miles. When the English mariners first arrived on the coasts in the early part of the sixteenth century, they found the old legends of the island's former extent, west and south, perpetuated in the charts of the period, Galle being placed in 4 degrees north latitude.

[1] Artemidorus is quoted by Diod. Sic., c. 3; Strabo, l. 3; Plin. vii. 3; and Stephanus of Byzantium, 5th century; the fragments of his works remaining are printed in Hudson, Geo. Vet., i. 85.

[2] Solinus, ch. 53–56, p. 83, "ipsa porro Taprobana in sinus Gangetico contra Narsinga regnum."

[3] Muller, Geo. Vet., ii. 501.

[4] Hudson, i. 9, 35, 26.

The majority of writers and travellers to the end of the seventeenth century believed that Sumatra was the Taprobane of the Greeks, but numbers rejected it and maintained the claim of Ceylon, while Kant undertook to prove it was Madagascar, and Dominick Cassini got rid of it by an inundation, the Maldives alone remaining to show where it had been. Among those who contended for the claim of Sumatra were Sebastian Munster, G. Frisius, Ortelius, Ramusio, Jules Scaliger, Di Conti, Mercator, M. Transylvanus, Franciscus, Varthema, Barboso, Sir T. Herbert, etc., and Linschotten, who says "Sumatra, the famous island of Taprobane and Ophir of Solomon."[1] Wilford also contends for it at length in the "Asiatic Researches," vol. x. Juan Serano (A.D. 1512), in his account of an escape from Malacca,[2] says, "passing by Sumatra, we gathered from its position and the sayings of the pilots and ancient geographers, that this island is Taprobane, in which there are four idolatrous kings. The wives of the natives burn themselves. From Borneo we came in three days to another island called Zaylon." Among those opposed to it were De Barros, Salmasius, Cellarius, Bochart, Claverus, De Lisle, etc. Andrea Corsalli, (1515), in his letters from Cochin to Julian De Medicis, says, "Questa isola di Zielam mi pare la Taprobana et non Sumatra, come mi dicono molti." The gentleman of Florence who accompanied Vasco de Gama to India in 1498 remarks of Ceylon, "della isola Taprobana dellaquale Plinio scrisse si largamente nó sa dir altro." Sir E. Tennent places Corsalli among those who thought Sumatra was Taprobane.

William De Lisle (1700) was the first who set about the task of reconstructing the geographical edifice and clearing away the obscurity ages had thrown over it; in doing this, he made use of the improvements in astronomy, which his predecessors had neglected, and laid the foundation of our present correct knowledge of geography.

Mediæval idea that there were two Ceylons.—However it originated, an idea also existed among Mediæval geographers

[1] Ramusio, Viagg. vol. i. 132, Ed. 1554 ; Gosselin, Géos. des Grec., vol. iii.

[2] Hon. H. Stanley, Barboso Appen., p. 226.

that there were two Ceylons, one situated at the extremity of the Indian peninsula and the other in the Archipelago, usually identified with Sumatra. It is possible some may have been confounding "Junk Ceylon," a small island on the north-west coast of Malay, with the real Taprobane, and this may have been the eastern Ceylon found in so many Mediæval maps. It is not known when the term Junk Ceylon, derived from the Malay *Ajunk-Selang*, was applied to this island. (*Vide* ch. x.) The idea of two Ceylons, which first appears in Mas'udi (A.D. 920), continued to exist until the arrival of the Portuguese in India, and is clearly expressed in the Florentine "mappe-monde" of the Pitti Palace (A.D. 1417), where Ceylon is called "Taprobana, and Sumatra Taprobana Major." The real Taprobane seems at last to have lost its name and identity in the confusion, and it is remarkable that King Alfred, who translated the geography of Paulus Orosius, a Spanish writer (A.D. 416), should have been better informed on the subject than Haldingham his own countryman living five centuries after him, or the map-makers of the sixteenth century.[1] Most of the Arabian geographers who first began to write geographical works, about A.D. 700, place Serendib in the right position. Al-Biruni (A.D. 1030) has two Serendibs, one to the south of India and the other, which he calls Zabage Serendib, in the Archipelago; while he makes Kalah and Lamuri an Arabian name for Sumatra, two small islands on the eastern coast of Ceylon.[2]

In Roger King of Sicily's "Round Table," engraved as a mappe-monde (A.D. 1154), supposed to have been compiled by Edrisi, Serendib is made a great size, and Sumatra called Kalah and Rami; in another of Edrisi's maps Ceylon is delineated much smaller. H. de Mayence, twelfth century, places the "Great isle of Paradise" south of the Ganges, and

[1] King Alfred's translation of Orosius into Saxon English has been edited by Bosworth, London, 1850, from the Cotton. "MS." at Oxford; the Latin ed. of Havercamp has "a sinistra promontorium Caligadama cui subjacent ad eorum insula Taprobana," p. 12.

[2] Reinaud, Géog.d'Aboulféda; Lelewel, Geo., p. 29; Santarem, Cosmo, iii. 335. The Florence map has "Xilana Taprobana insula trium milium miliariorum ambitum, rubinis sapphiris granatis et oculis gattæ, cinamomum," etc.

Taprobana near the Persian Gulf. In the Hereford map, fourteenth century, by Haldingham, a great island described as full of elephants and dragons, placed in the Indian ocean adjoining the peninsula and called "Tuphana,"[1] evidently means Ceylon.

In the maps of the Middle Ages, when the fashion of using Latinised names and delineating places by fanciful figures was introduced, the utmost absurdity prevailed in these designs. In the map of Marino Sanuto (A.D. 1320), at Brussels, Ceylon is called "Insula Siledpa-Camar": the Paris map has Lince de Camar and Lanka-Comar, confounding it with Madagascar. The most remarkable of the figure maps is the Catalan (A.D. 1375). Here Sumatra is called Taprobane, probably the earliest application of this name to Sumatra. Some suppose Ceylon to be omitted; but it is represented by "*Illa Iana.*" There are some grotesque figures representing pearl-divers drawn close to the island, and on the Malabar coast a town called Colombo, the present Quillon.[2] This map represents a female sovereign as ruling part of "Illa Iana," which may be an allusion to the queen of the Wanney, a district of Ceylon at one time ruled, according to Turnour, by women. There appear to have been formerly several places ruled by females in the East, as the Maldives and Comar, an island near Madagascar mentioned by Edrisi and Soleyman. Kazewini has a *Regio fœminarum* in the Archipelago.

Ixola de Colombi and Pertina is the only indication of Ceylon to be found in the map of Andreas Biancho (A.D. 1436), which is here confounded with the Latin bishopric in Malabar, represented by both Pigolotte (1471), and Friar Mauro (1457), as an island, but they do not confound it with Ceylon. In the round map (1417), named after P. Mela, in the library at Rheims, there are some nameless islands delineated to the south of India. Friar Mauro, in his celebrated map, has "Saylan" in the right place, and near Sumatra is written "Mari Tamarbam;" Martin Behan of Nuremberg (1492) places "Taprobane" in the right place, but makes it larger than India, and has Seylan near Java. In an Anglo-

[1] Santarem, ii. 430. [2] *Vide* ch. x.

Saxon map of the tenth century in the British Museum, Taprobane can be recognised in "*Sabrobancubar*," a large island to the south of India. Johanes de la Costa (1500) has Taprobane under the form of a triangle occupying the place of India, which does not extend more south than the Ganges. In a Portuguese chart (A.D. 1501 to 1540), Ceylon is called Tragana, Sumatra Taprobane, and there is a Seulon near Java. Ruysch, in one of his maps (1507), has Sailan in the right place, and Taprobana for Sumatra with a small Taprobane south of Ceylon! Bernard Sylvanus, the Neapolitan (1511), exceeds them all in eccentricity, having "Seilan inferior" near Java, and Taprobane filling up the Bay of Bengal. In another of his maps Ceylon is called Insula Capane, which name occurs in the Itinerary of John of Hese, who says, "Insula Caphane, vel Taprobana." In contradistinction to all this confusion there is a very correct map in the Ducal palace at Venice, attributed to Marco Polo, drawn upside down, after the Arabian manner.

CHAPTER III.

PHYSICAL GEOGRAPHY.

The geology of Ceylon has not yet been regularly surveyed by a professed geologist, but it is marked for examination on the map of the geological survey of India which has been going on for some years. Dr. Davy was the first who gave a scientific description of it in his admirable work on the island published in 1821. Some further examinations were made by Dr. Gardner, of the Botanical establishment at Peradenia, published in the appendix to Lee's translation of Ribeyro, and Dr. Gigax, a Swiss, was employed by the government of the colony, in 1847, to examine the mineralogy. Dr. Ferdinand Hochstetter, geologist to the Novara expedition, who has described the geology of New Zealand, made a few observations on the geology of Adam's peak and the gem districts, which will be given further on.

Legends of the Brahmins.—The Hindus,[1] in common with the Chinese and Siṇhalese, believe that the whole world has been, since its creation, subjected to great changes of surface, parts being alternately raised and submerged beneath the ocean, and the legends of the Brahmins indicate a traditional belief in great geological changes in India within the memory of man, and that formerly an extensive continent or archipelago extended below the equator, including the Maldives, Ceylon, or even Sumatra, to which the terms Maha Lanka and Maha Indra-dwipa were applied, indicative of its great size.

These legends have had a sort of confirmation given them by modern geologists, who think "at the commencement of the Tertiary period a considerable portion of southern India

[1] The ideas of the Chinese are given in the J. R. A. S., vol. xv.-xvi.

was covered by the sea, but land extended probably towards east and west from central India, perhaps connecting Arabia with the peninsula of Malacca. This broad tract of land contained an extensive fresh-water lake, on whose banks were vast herds of the larger mammalia. The Himalaya and mountain chain of Persia were probably then indicated by a chain of islands, and only at a later period elevated into mountains, corresponding to an extensive area of depression in the Indian Ocean, marked by the coral islands of Laccadives, Maldives, the great Chagos bank, and some others."[1] The rising of the Indian shores was pointed out in the last century by the Catholic bishop of Virapoli, the seat of a famous seminary near Cochin, in a MS. description of Malabar; he observes that, from accounts of the learned natives of that coast, it is little more than 2300 years since the sea came up to the foot of the Sukhim or Ghaut mountains, and that it did so once he thinks extremely probable, from the nature of the soil and the quantity of oyster-shells and other fragments met with in making deep excavations. The Brahmins ascribed the change to the penitence of Puresa-Rama for spilling so much blood in his war against the Raja of Khetry when he caused the sea to retire in order to give the land to them. (Asiatic Researches, vol. v.).

Recent investigations into the geology of South Africa "leave little doubt of the former existence of a vast southern continent; the cretaceous rocks about five miles from the southern boundary of Natal are identical with those of Pondichery, from which it appears Africa and South India were originally one continuous continent . . . . the large area now covered by the Indian Ocean is supposed to have been the basin of an extensive series of lakes, which explains the occurrence of the same plants and large reptiles which were then living in India and South Africa; the greater portion of the Indian Ocean, with a large part of India and South Africa, must have been afterwards depressed and covered with a shallow sea having a peculiar fauna; the cretaceous deposits

[1] D. T. Ansted, M.A., The Ancient World, 1848, p. 323; Sir W. Jones, Ord. of Menu.

of South Africa and India are all shallow-water coast deposits, shown by the quantity of wood found imbedded in them. Since then the coasts have been rising; *implements of early man have been found in the raised beaches at Natal.*

"The most recent evidence of the southern continent are the coral islands of the Indian Ocean now crowning the tops of the ancient mountains of the subsiding land." [1]

Sir C. Lyell, mentioning the geological discoveries in India of Sir P. Cautley and Dr. Falconer, says, "there have been found, between the Jumna and the Ganges, a district nearly 3,000 feet above the sea, inclined strata of sandstone, shingle, and clay, containing a variety of fossil mammalia, reptiles, and fresh-water shells, among which were remains of the giraffe, camel, and a large ostrich, which may be cited as proofs that there were formerly extensive plains where now a steep chain of hills with deep ravines run for several hundreds of miles east and west." [2]

It is given, as a proof of the antiquity of the trade between the eastern coast of Africa and the kingdom of Cutch, that it was carried on by the Banians from towns in the gulf, once seaports, but now left far inland by the gradual retirement of the waters, and that there is a striking difference between a map of the eastern coast of Africa in Queen Anne's time and one made about fifty years since." [3]

Murray, in his geographical distribution of mammalia, gives a number of maps showing these changes, some taking place at present, such as the gradual sinking of the Laccadives,[4] Maldives, and other places, accompanied by a rising of the shores of Ceylon and the land in the Bay of Bengal. It is calculated a depression of 600 feet on the eastern half of the globe would effect wonderful changes, making Hindustan almost an island, from south of the Ganges, swallow up half Ceylon, Arabia, Southern India, Sumatra, Siam, Burmah, and

[1] Quarterly J. Geo. Soc., 1870, p. 70; 1871, 546.

[2] Prin. Geo., ed. 1865, i. 274.

[3] Address by Sir Bartle Frere, London Institute, Mar. 1875.

[4] Instances are frequently recorded of the disappearance of these islands, one of the latest being in 1865.—Geol. Mag. 1865, ii. 139.

two-thirds of Australia. Yet so minute a measure is 600 feet compared to the whole globe, it would be a deviation in the spherical surface of only about $_{200000}$ part of the great circle of the globe (or 24,897 miles); hence it follows, if this very minute deviation were to take place suddenly on one side or the other of the crust of the earth, it would so disturb the present arrangement, dividing the land from the waters of the ocean, as to consign to instant destruction half the inhabitants of the globe.

It is also imagined by geologists that Sumatra, Java, Borneo, and the Philippines are parts of Asia, separated from it at no distant period. The Moluccas, Celebes, New Guinea, Timor, and Australia, surrounded by an unfathomable ocean, being remnants of another vast continent, this boundary line passes between the Celebes and Borneo westward through the straits of Lombok, south of Java, dividing the Asian and Australian zoologies.[1]

The remarkable affinity found to exist between the hill-tribes of India, of whom the Veddahs of Ceylon are but a part, and the aborigines of Australia and South Africa, is given as a proof that these places must have been at one time almost united, and the inhabitants separated by geological changes, the antiquity of man being admitted to extend as far back as the glacial period.[2]

Remarks of Ancient Authors.—Several statements are found in ancient and Arabian writers confirmatory of the views of geologists. Pliny (ii. 87), quoting Herodotus, remarks, if we may believe him, "the sea in his time came beyond Memphis as far as the mountains of Ethiopia." The soil on which Alexandria stands was probably not in existence when Memphis was in its glory.

Geological changes in the Punjab are indicated in the "Rig Veda;" the waters of the "Sara," a great river, which formerly reached the sea, in course of time became lost in the desert.

Ayeen Akbery, in his description of Kashmir, says, "according to the "Rajatarangini Chronicle," in the early ages of the

[1] Nat. Hist. Rev. and Geog. Soc., 1864.—A. R. Wallace, Malay Archip. i. 17.
[2] Lyell, Antiquity of Man; *vide* also ch. vii.

world all Kashmir, excepting the mountains, was covered with water, and was then called Suttysir; when the waters subsided, Kushup brought the Brahmins to inhabit it."[1] In M. Troyer's translation of the Chronicle, this description appears to refer either to some legend of the deluge, or to the fact that the Valley of Kashmir was formerly a lake, which was also the case with the Valley of Nepal.

Al-Biruni, an Arabian geographer (A.D. 1039), remarks, "if you examine the country of Hind, and consider well the round stones which are found below the soil . . . . you cannot but conclude that this country was once but a mere sea."[2]

Sir C. Lyell, in his "Principles of Geology,"[3] quotes two other Arabians on this point. Omar, in his "Cosmogony of the Koran," remarks that the charts of his own time, compared with those made by Indian and Persian astronomers two thousand years before, showed that important changes had taken place in the outline of the coasts of Asia. Kazwini also, in his "Wonders of Nature," alludes to changes then taking place in India.

Changes in the Equator.— Some geologists suppose the equator did not always pass over the same portions of the globe as at present, and that the antediluvian equator was at right angles with the existing one. In trying to account for what is called the glacial period, one of the earth's most recent changes, they imagine it to have been caused by the shock of coming in contact with a comet or some other body moving in the heavens, which turned our globe over and modified its position in relation to the sun, changing the axis of rotation, thus suddenly thrusting a part revelling in the sun of the tropics under the frigid cold and gloom of the polar regions, when everything coming under its influence was instantly frozen. Others imagine the change in the axis of rotation to have been caused by the gradual accumulation of vast masses of ice in one of the poles, less under the sun's influence, than

[1] Gladwin's Ayeen Akbery, i. 178.
[2] Elliot, Hist. Ind. i. 45; Rajatarangini, ii. 295.
[3] Ed. 1872, i. 7—28.

the other, in consequence of the oblique nature of the earth's revolution round the sun, the ice thus accumulating at last changing the equilibrium of the globe," but the change caused in this manner would more naturally be a gradual than a sudden one [1] The idea of a comet having once desolated this world originated with Dr. Whiston in the last century, and was supposed by him to have caused the great deluge.

Probable submergence of part of Ceylon within the historic period.—The dimensions and position assigned to Lanka in the cosmogony of the Hindus shows, if Ceylon was meant it must have been very much larger than at present, although the description of the world given in the Puránas proves the authors knew little beyond India ; they could hardly have been so ignorant about Ceylon, and it seems very probable that some portion of the island has been submerged within the memory of man, but the testimony on the subject points only to the submergence of the western shores, which the Hindus believe were within the historic period united to the Maldives, and that the sea leaving the Malabar coast separated them. Sir W. Jones adopted this idea, thinking appearances between Ceylon and the Maldives justified the belief.[2] It has been calculated that Siri Lanka Pura, the legendary capital, through which the meridian of the Brahmins passed, must have been in 75° 53′ east longitude, while the present western extremity of Ceylon barely reaches 80°. Marco Polo also alludes to it, saying half the island had been engulfed by the sea, which was caused by the north wind blowing so strong on its shores, and what remained of it formed one of the largest islands in the world. It is a curious circumstance that the whole of the Greek geographers, commencing with Eratosthenes, imagined the island extended much more to the west than it actually does.

The Portuguese on their arrival found traditions of the

[1] Figuier, "The Antediluvian World," p. 378.

[2] Works of W. Jones, i. 120 ; idem, Asia. Res., iii. 44; Capt. MacKinsay, Asia. Res. 1796, vi. 426 ; Hamilton, Dis. of Hindus. ii. 502 ; Reinaud, Mém. sur l'Inde ; idem, Géog. d'Aboulféda, pref. cxvii. The opinions of the Portuguese on this subject will be found in De Couto, dec. iii., p. 110.

island's former extent among the natives, and the Sinhalese chronicles mention three different risings of the sea. According to Forbes, the natives say Lanka, which was originally 5,120 miles in circumference, was reduced by these successive inundations to 928 miles, not far from its present size. The first occurred (B.C. 2387) after the death of Ravena, when Siri Lanka Pura was destroyed, which very nearly concurs with the flood of Noah (B.C. 2348).[1] The second took place in the time of Panduwassa (B.C. 504), and the extensive submergence of the shore near Colombo in the reign of Deveni Piya Tissa (B.C. 306), when the Rajavali says, "the sea was seven leagues from Kalany, but in consequence of a priest being tortured and put to death by King Tissa of Kalaṇy (a subordinate ruler), the gods, who were charged with the conservation of Lanka, became enraged, and caused the sea to swallow up a hundred thousand towns and more than a thousand fishermen's villages, including four hundred belonging to pearl-fishers, in the same way as during the time of Duwapawrayaga, twenty-five palaces and four hundred thousand streets were over-run on account of the wickedness of Ravena." King Tissa was punished by being sent to a Hell with a copper roof so hot that the sea dried up as it passed over it, and his daughter, put afloat on the ocean to appease it, was carried by the waves to India, where she married a prince of the country.[2]

The "Mahawanso" mentions that the isles of "Girdipo," which now form the dangerous sunken rocks called the "Basses," on the south-eastern coast, were submerged by another inundation, and speaks of many phenomena which took place in the reign of Tissa, when gems and metals buried in the earth, and treasures sunk in the sea from ships wrecked in the vicinity of the island, rose to the surface.[3]

There are few parts of the world that have not some legend of the Deluge. It is not mentioned in the "Zend Avesta" nor in the "Rig Veda," but one of the latest "Brahminas" (B.C. 600) contains an account of an Ark resting on a mountain; and the

[1] Forbes' Ceylon, ii. 257; J. A. S. Beng., 1835.
[2] Upham's version, ii. 131, 180, 190.
[3] Turnour's Mahaw., ch. xi. 74.

Varna Pana speaks of the building of a ship by which one man alone escaped.[1] The Cherokee Indians had a legend that all men perished in a flood. The Polynesians and Fiji have an account of one. In China, Fa-He, the founder of their civilisation, is represented as escaping from a deluge. The Mexicans had paintings representing a man and his wife in a boat; then there is a recent discovery by Mr. Smith among the Assyrian tablets in the British Museum, and the Chaldean tradition of the Deluge closely resembling the Biblical account.

Ceylon probably never joined to India; difference between the Fauna.—The "Ramayana," one of the oldest Hindu poems now extant, represents Lanka as detached from the main land (*vide* ch. iv.); but apart from legends, the dim traditions of the Brahmins, or the speculations of geologists, there is sufficient peculiarity in the fauna of Ceylon and distinction from that of India taken as a whole, to show that it probably never formed an integral part of the Indian continent as at present constituted.[2]

It is denied that there is any radical difference in structure between the elephant of India and Ceylon, which is the most notable instance put forth by Sir E. Tennent and Professor Schlegel of similarity in the fauna of Ceylon and the Archipelago, the elephant being according to them identical with that of Sumatra and different from the Indian. However, a number of Indian mammalia are wanting in Ceylon, as the tiger, hyena, goat, cheetah, wolf, fox, and deer of the gazelle and antelope type, also vultures, &c.; while many birds of Ceylon are unknown in India, with one deer, two monkeys, two viverra, one squirrel, various reptiles, &c.[3] The distinc-

[1] Muller's Hist. San. Lit., Williams' Ramayana, p. 35. A poem by Calidasa, called the "Legend of the Himalaya," states that a mountainous island, named Mainaca, in the gulf of Manaar, was sunk by a thunderbolt.—J. A. S. Beng., 1833, p. 347.

[2] According to De Barros, the Siamese believed Ceylon was at one time joined to Cape Comorin. "E tem por memoria de suas escrituras que foi fa conjunta com a terra firme do cabo Comorij."—Dec. iii., p. 110, ed. 1777.

[3] *Vide* chap. xxiv. The Rev. R. Caldwell quotes some old Tamil sayings that it was formerly accessible from the continent on foot at low water.—Grammar, p. 79.

tion between the fish of Ceylon and India is not very marked, but some of the insects have more affinity to those of Australia than of northern India.

Although there is considerable resemblance between the fauna of Ceylon and the Archipelago, many Malay forms are absent from Ceylon that are found in India; for instance, there are no argus pheasants, neither has the rhinoceros, which abounds in Sumatra, been found there, nor is there any tradition among the Sinhalese of this animal ever having been known in the island, and become extinct like the gaur. Sir E. Tennent was the first to point out that the fauna of Ceylon and India were not identical, which was the general opinion previously: he places the gaur (*Bos gaurus*) among the mammalia not belonging to Ceylon, but there is sufficient proof that it was found there formerly. In support of his views he quotes [1] a paper on reptiles by Dr. Gunther, in the "Annals of Nat. Hist.," 1859, who says, "Among the larger islands which are connected with the middle Palæotropical region, none offer forms so different from the continent as Ceylon; it may be considered the Madagascar of the Indian region; we not only find there peculiar genera and species not again to be recognised in other parts, but even many of the common species exhibit such remarkable variety as to afford ample means for creating new nominal species."

Peculiarity of forms and variations from adjoining lands is not however confined to Ceylon, being common among the islands of the Archipelago. Again, many of the Madagascar forms are quite different from the neighbouring African continent, and resemble those of India.[2] The dissimilitude of the zoologies of Sumatra and Java, parted from each other by a narrow channel, is as remarkable as that of India and Ceylon. The elephant and tapir of Sumatra have no existence in Java;[3] even the rhinoceros and wild hog of Sumatra differ from those of Java; this difference extends also to the birds. The argus pheasant of Sumatra does not exist in Java, nor the pea-fowl

[1] Vol. i. 8, P. Z. S., 1858.
[2] *Vide* chap. xxiv
[3] Crawfurd, Dict. of the Archip.

of Java in Sumatra. The tiger of India is also stated to be found in Sumatra.

Dr. Gray accounts for the difference between the insects of Ceylon and India by showing that "Ceylon is nearer Australia in point of latitude than those parts of Hindustan, such as northern Bengal, Silhet, and the Punjab, from whence the Indian insects most known are brought. The insect fauna of the Dekkan, Nilgherries, and Carnatic, are almost unexplored, and would probably more resemble those of Ceylon."[1]

Professor Owen adopts the idea that Ceylon did not form part of the continent, saying, "certain it is that geologists had conceived that the islands on the south of the present continent of Asia might be remnants of some antecedent very distinct group of land, and naturalists, especially Sir E. Tennent, had brought to their knowledge a host of facts confirmatory of the idea that Ceylon was not a dismemberment of India, but part of a distinct and antecedent continent; in confirmation of this idea they had the geological researches of Cautley, Falconer, and others in India, which seemed to show the Himalayas had risen within comparatively recent geographical times, India being one of the latest results of great upheaving forces."[2]

On the contrary, Mr. Murray[3] thinks the island formed part of the peninsula, quoting Dr. Falconer's article on the elephant of Sumatra, in the "Natural History Review," 1862, adding, "the settlement of this question by Dr. Falconer helps to extinguish a doubtful speculation as to Ceylon and Sumatra having been formerly continuous, which was brought forward by Sir E. Tennent, and adopted by Professor Schlegel, referring to the supposed identity of the two elephants and the differences between the fauna of Ceylon and Southern India; a former communication may have existed, but it must have been long before the last adjustment of the relations between land and water, ... while Ceylon, as has often been remarked, presents all the physical characters of being a severed portion of the mountain chain of the Ghauts. With certain

[1] In Tennent, i. 270. [2] Proce. of Geo. Soc. 1862, p. 44.
[3] Geo. Dis. of Mammalia, 1863, p. 193.

exceptions, the mammalian fauna, as a general rule, confirms this view, as do also recent investigations on the flora of the mountain regions of Southern India."

On the whole, we may conclude that Ceylon was not actually joined to Sumatra, but may have been connected with southern India, forming along with it part of the submerged continent, both separated from Northern India, and that while the fauna of Ceylon has some peculiarities of its own, it still belongs to the Southern Asian region, including Borneo, Philippines, Java, Sumatra, Siam, and Southern India, separated from the very distinct Australian mammalian fauna by the straits of Macassar and Lombok.

The boundary line of the Asian fauna on the side of Arabia has not yet been well defined, that country being regarded by zoologists as debatable ground between Ethiopian, Indian, and Palarctic regions. Although Indian species are generally very distinct from those of Africa, many genera of quadrupeds are common to both, and some forms are peculiar to the Indian region, as the sloth bear and musk deer.[1]

One of the latest works on the fauna of British India is by W. T. Blandford, F.G.S., who says, "In the various works published of late years on the geographical distribution of animals, it has been almost invariably assumed that the fauna of India proper and the Malay countries is identical. This is not the case however; the fauna of the Himalayas, especially to the eastward, is purely Malay, and that of the hills along the Malabar coast and in Ceylon has very marked Malay affinities, but the fauna of the plains of India generally is, if anything, more closely allied to Africa than Malay. In Bengal, Orissa, Malabar, and Ceylon, Malay forms are more largely represented, while African types disappear. In South India several peculiar forms occur, such as *Presbytes priamus*, *Macacus radiatus*, *Tapaia Elliotii*, and *Lepus nigricollis*. Considered as a whole India proper is not an integral portion of the Malay zoological province, but a border land containing a mixture of Malay and Ethiopian faunas."[2]

[1] Lyell, Prin. of Geol., ii., p. 350, ed. 1872; 1865, p. 340.

[2] Report of Brit. Assoc., 1869, p. 108.

Geology of Sumatra, Southern India, and Ceylon compared.—Arguing from geological indications there is a greater probability that Ceylon was joined to Africa than Sumatra; the water on the western coast is comparatively shallow, while on the eastern side it is very deep; according to some recent soundings made in the Bay of Bengal, on a straight line drawn from Penang to Galle, in Ceylon, the lead in some places indicated a depth of 2,200 fathoms,[1] which does not look as if it ever could have been joined to Sumatra; and there is little resemblance between the geology of the two islands. Sumatra is very volcanic, having a mountain 12,000 feet high. On the western coast granite forms the substratum, trap and basalt rocks are abundant, also green sandstone, marble, and limestone. In the large island of Pulo Nias, on the western coast, there are calcareous rocks resembling some of the oolitic formations in Europe, and a green sandstone very similar to "Kentish rag," also slate rocks and iron pyrites. Pulo Nias has apparently been quite recently upheaved from the ocean, unfossilized coral being found on the tops of the hills.[2]

Although far to the eastward of the great chain of the Ghauts, the mountains of Ceylon run in the same direction. The Ghauts, the great granitic and metamorphic district of India, are everywhere as near the surface as the gneiss of Ceylon, being often covered by little more than beds of alluvium; the southern range of the Concan Ghauts is composed of trap rocks covered by beds of soft laterite, and a few dykes of trap have also been found in Ceylon, while the gneiss of Southern India possesses the same disintegrating and laterite forming properties as that of the island

Like the mountains of Ceylon, the western Ghauts and Nilgherries are older than the Himalaya, and supposed by Elie de Beaumont to have been elevated before the existence of life on our planet, although their great age has been doubted by some,[3] and their elevation referred to the tertiary period.

[1] Geo. Soc. Jour. vol. xxxix., p. clix.

[2] Trans. Geol. Soc. 1824, v. i., p. 400.

[3] J. A. S. Beng. 1835, p. 433. Capt. Newbold, Geol. of S. India, J. R. A. S. xii. 85.

Cretaceous rocks similar to those of Ootatoor and Trichinopoly, in Southern India, which contain such numbers of *Cephalopoda*, are wanting in Ceylon. "The prevalence of *Baculite*, *Hamite*, *Ammonite*, and *Belemnite* in the Pondicherry limestone, seems clearly to indicate that this formation belongs to the secondary era; on the other hand, the prevalence of volutes indicates an unusual mixture of forms—many have been identified with known species, and are all tertiary shells of the Paris basin."[1] Ansted refers "the cretaceous systems of Southern India to the period of the lower green sandstone, or perhaps they represent that intermediate period during which our Wealden beds were being deposited."[2] As to the probability of a former communication between the island and the peninsula, the mountains of Ceylon have clearly undergone no second submersion since they were elevated above the ocean, and the remarkable absence of the secondary and tertiary systems of Southern India shows that if they were formerly connected, a disruption caused by the sinking of the primitive rocks in Southern India, leaving the mountain part of Ceylon standing, must have occurred before the cretaceous beds were deposited, this part of India having been again elevated above the ocean, apparently leaving a wide space of sea between it and the mountains of Ceylon, a great part of the interval then separating them, now forming the northern part of the island, having been since filled up by coral and recent formations. Assuming that they were united after the formation of the cretaceous rocks of Southern India—which does not seem probable, judging from the nature and extent of the madrepore formations in the north of the island—there must have been a second disruption since then. One thing is certain: at some period the island, or rather the mountain region, must have had a much wider interval of sea between it and the peninsula than at present, and have been nearly circular in form.[3]

[1] Trans. Geol. Soc. vii., p. 88, 2nd series.
[2] Ansted, Geol. i., p. 470.
[3] Geolog. Records of India, iv. part 2, p. 44; viii., part 1, p. 13.

CHAPTER IV.

PHYSICAL GEOGRAPHY.

General aspect of the island.—Four-fifths of Ceylon consist of undulating plains, surrounding a compact and lofty mountain region of singular and romantic beauty, rising rather abruptly above the lower country in the south-western part of the island, at some distance from the coast. Great part of the circumference is lined with a sandy beach, separated from the deep blue ocean by a line of dazzling foam as the surf surges up the strand, but the eastern shores, in some places, are bold and rocky, and the southern coasts elevated, forming numerous picturesque headlands. On both sides of the island the sandy portions are intersected by shallow lagoons of brackish water.

Except in a few districts, from the sea shore to the highest mountain peak, the island is covered with luxuriant vegetation, and primeval forests, more or less dense, in perpetual bloom, the ripe fruit hanging on the same branch with the opening flower. Although there are no changes of seasons or autumnal frosts to alter the colour of vegetation, there are so many brilliant and showy tropical flowering trees and shrubs, *Malvaceæ*, *Jonesias*, *Erythrinas*, *Buteas*, *Dilleniaceæ*, *Lagerstrœmia*, *Bignoniaceæ*, and varied colours in the leaves and young shoots—those of the *Olax Zeylonica* being copper, the *Mussænda frondosa* white, the cinnamon and *Mesua ferrea* scarlet—that there is as much variety of hue as is seen in an English autumn; still, there is generally such an excess of vegetation, every mountain top and valley being equally imbedded in verdure, that the eye, as it ranges over the landscape, looks in vain for some craggy summit to relieve the soft monotony of outline. It is at an elevation of from 2,000 to 4,000 feet in the southern mountains

that the greatest luxuriance prevails; here the lofty trees are clothed with parasitic *Loranthus*, *Orchidaceæ*, and *Convolvulus*, and scaled by gigantic climbing plants, *Bauhinieæ* and *Mimoseæ*, suspending pods more than a yard long; the beauty of the wreaths formed by the more brilliant blossomed scandents is excessive, particularly the *Pachycentra*, with their charming rose-coloured flowers.

An almost perpetual moisture prevails in the undergrowth, from the frequent showers and heavy dews of the interior, the close foliage overhead preventing the vapours rising. In these steaming forests there is a perfect struggle for existence among the members of the entangled mass of vegetation, half smothering each other in their luxuriance; gigantic trees grow so close to each other there is little room for side branches, and they struggle upwards to great heights before they are able to throw out many. Stems of scandents, clinging to the trees, are drawn upwards with such force they become as tight as rigging in a ship, and some, more vigorous in their growth, strangle their fellow plants in their enormous coils, like serpents. There is little dead wood to be seen; when a tree falls from age it is speedily hidden by the undergrowing plants, and decays so rapidly that in a few weeks the venerable giant of the forest turns into mould; the rapidity with which dead vegetation disappears is as extraordinary as the rapid growth of the plants which replace it.

Another feature in the jungles, particularly of the north, is the quantity of formidable, thorny plants, making them in some places almost impassable, and were employed by the native princes as defences to prevent strangers forcing their way into the interior, blocking up the narrow paths through the jungles with them. Among these thorny plants are climbing *Aurantiaceæ*. The *Acacia latronum*, called the buffalo thorn, from its resemblance to the horns of a bullock, growing in pairs some inches long, of a white colour, and the formidable *kudu miris*, or jungle nail, as sharp as a lancet; then there are some species of Phoberos, having their trunks covered with long spikes; also one of the palms (*Caryota horrida*, Moon).

The northern shores are little raised above the sea, and the

country about Jaffna distinguished by vast groves of palmyra (*Borassus flabelliformis*), irrigated fields, and extensive agriculture. The regular height of the palms, unrelieved by any background of hills, gives at a distance a dull character to the landscape. The north-western coast about Manaar and Aripo presents to view a sandy and desolate beach, with here and there a few palms, showing the scattered abode of man and the scarcity of water. The country inland for some distance is formed of low sandy plains, covered with a thorny jungle, acacias, wood-apples (*Ægle Marmelos*), and a few baobab trees (*Adansonia digitata*), their huge trunks, almost branchless and leafless, looking like some fossil remnant of the antediluvian world. Passing this district, vegetation, under the influence of the south-western monsoon, and its accompanying moisture, becomes rich and profuse, dense forests extend inland, and the seaboard, fringed with groves of stately coco-nuts, extending round the southern coasts, the salt-loving palms bathing their feathery heads in the mist that rises from the surf as they incline over the sea.

Going round the south-eastern shores, as we ascend the eastern side it gradually assumes a comparatively arid aspect, caused by the drier winds and climate. The muddy and swampy beach near river mouths is covered with dense groves of mangroves, throwing out their arching roots to be washed in the surf, while plantations of coco-nuts at intervals mark the hamlets and vicinity of population, particularly at Batticaloa (literally mud lake, Matta Kalappa), on the great sand-bank outside the lagoons. Here a network of still-water lakes and canals, filled with brackish water, swarming with crocodiles, spreads along the shore, covered with dense foliage, the haunt of the kingfisher, crane, and other aquatic birds who prey on the fish in the lagoons. Numerous *Pandanus*, *Tamarix Indica*, and *Sonneratia acida*, grow more inland.

On the great flat tract which extends to the north-east between the mountain region and the sea-shore, the lower parts are covered with a thorny jungle and stunted trees, similar to the Aripo district, with a large proportion of Euphorbias and fleshy shrubs. Further inland, and at an

elevation of about 2,000 feet on the mountains, these are succeeded by a dense forest of large trees of nearly uniform foliage, except where the scarlet shoots of the iron-wood trees (*Mesua ferrea*), looking like flowers, and the broad leaves of the wild plantain (*Musa sapientum*), relieve the monotony.

In the mountain districts the continuous forests of the lower country are broken by open plains, covered with lemon grass (*Andropogon*), particularly in the Gampola and Pusilawa districts, where the primeval forests are now, in great measure, replaced by extensive coffee plantations, being the chief seat of its culture in the island. Gigantic rhododendrons grow in the plains of the higher regions, decorate the mountain sides, and the rocky summit of Adam's Peak with a mantle of crimson flowers.

General Character of the Geology.—Uniformity and simplicity is the principal feature in the geological structure of the island. Nearly the whole of Ceylon may be said to consist of primitive rocks, or their *débris*; gneiss is the most common of them; dolomite quartz and hornblende are less frequently met with. There is a remarkable hill of milk-white quartz, of a very fragile nature, at Trincomalee, called "Chapel Point," from its presenting the appearance at a distance of a mass of buildings.

"The clay-slate, silurian, old red sandstone, carboniferous, new red sandstone, oolite, and chalk systems, which form such remarkable features in the geology of England, have not been found, nor is it at all probable that they will."[1]

The maritime provinces are formed, to a great extent, from the *débris* of the gneiss of the mountains resting chiefly in the north and at Galle on decomposed coral formations.

Gradual Rise of the Island.—The only new feature added to the geology of Ceylon since Dr. Davy's description is the mention of the gradual rise of the western coast first observed by Mr. Macvicar at Mount Lavinia, and corroborated by Dr. Gardner in other places, who says, "the whole of the flat sandy country which stretches along the western coast, as well as that of a similar nature at Batticaloa, has, at no very recent geological epoch, been gained from the sea by the elevation of

[1] Gardner, in Lee, Appen., p. 208.

the shores."[1] The cutting of the new canal through the cinnamon gardens shows how recently the western coast has formed the bed of the ocean, and in other places marine shells have been dug up inland ten miles from the sea

Mountain System.—Grandeur is the great characteristic of the mountains of Ceylon, and there are few countries where the high land and low land are so clearly separated. There are also no lakes, every valley having an outlet.[2] The very compact mountain region, which contains an area of rather more than 4,000 square miles, is situated in the south-western and widest part of the island, and the central point of the upheaving force appears to have been about the dome-shaped Pedru-talla-galla, overlooking the valley of Newera Ellia, which has acquired an elevation of upwards of 8,000 feet; the chief direction of the mountains is from south-south-east to north-north-west. In the neighbourhood of Nammoonecoole they run north to south, circling round to west. From the central mass near Kandy, a range of low hills runs north as far as the ninth degree north latitude, forming the northern boundary of the basin of the Mahavilla Ganga; a similar ridge runs eastward in the southern province, and numerous offshoots extend westward from Adam's Peak, ending a good distance from the sea, a broad belt of low ground running between them.

The heights of the principal mountains are as follows:—

Pedru-talla-galla	8280
Kirrigalla Potta	7810
Tottapella	7720
Adam's Peak	7429
Nammoonecoole	6740
Plain of Newera Ellia	6240

"Detached hills of great altitude are rare, the most celebrated being that of Mihintala, near Anuradhapura, 1,026 feet high, and Segiri, the only examples in Ceylon of those solitary[3] acclivities, which form so remarkable a feature in the Dekkan table-land, with scarped and perpendicular sides, which have been converted into fortresses, accessible only by steps cut in

[1] Gardner, in Lee, Appen., p. 208.

[2] Davy

[3] Tennent, i.

the rock." The hill of Segiri was also turned into a fortress by Segri Kasambu, A.D. 477, who cut steps up the steep sides, some of which still remain. In the interior, several caves, partly natural, were turned into apartments, stone walls being built to join detached portions of the rock supported on platforms; tanks were also constructed to hold a supply of water, and a deep dyke surrounded the whole rock at some distance from the base.

The crest of the mountains is stratified gneiss and granite.[1] In common with most mountain peaks in the world the granite has thrust itself, with resistless energy, through the overlaying beds of gneiss, until it forms the highest pinnacles. The geology of Adam's Peak, as described by Dr. Hochstetter, of the Novara expedition, may be taken as applying to most of the mountain peaks in the islands. He says, "It is very simple and uniform. The chief direction of the mountains in the south is from south-south-east to north-north-west, corresponding with the chief direction of the strata of the gneiss of which they are composed. The gneiss is uniformly of a species not often met with, studded with garnets, and between the strata are inserted single beds of hornblende-gneiss, and splinters of pure hornblende, as also granulite-gneiss, and pure granulite. The steep, final cone of the rock consists of a granulitic gneiss of varying texture, from coarse to fine, and abounding in garnets; everywhere, even up to the highest summit, the gneiss is decomposed on the surface into laterite products. The huge blocks of brown ironstone, however, which are found near the summit in the hollow path, may owe their origin to the decomposition of the hornblende."[2]

At Newera Ellia the gneiss is of a very granitic character; the crystals are larger, and not arranged so completely as in

[1] Granite, gneiss, and the plutonic or igneous rocks, of which mountain masses are formed, are crystalline compounds of four minerals, namely, quartz, felspar, mica, and occasionally hornblende, the variation in the proportion of the constituent parts causing the distinctions between them; for instance, gneiss contains more mica than granite and less felspar. There are many varieties of these rocks, the proportions of the materials of which they are composed varying in different districts, or even in the same mountain.

[2] Vol. i. p. 417, English translation.

other varieties. Hornblende is seen in distinct layers adhering to crystals of quartz and felspar; it is also studded with garnets. In some places the gneiss is covered with a species of dolomite. Scales of graphite are found between the layers of syenitic gneiss[1] and kaolin. There is also a large hill of syenite traversed by veins of quartz at Galle.

"In consequence of the intrusion of the granite through the overlaying beds in the Saffragam district, plutonic rocks are seen mingled with dislocated gneiss. In one place south-east of Pettigalle Kandy rocks have been broken up in such confusion as to resemble the effect of suddenly cooled lava, presenting a strong similarity to one of the semi-craters round the trachytic ridge of Seticidadas, St. Michael, in the Azores."[2]

Recent Formations.—The greater part of the peninsula of Jaffna consists of breccia, a substance formed by the agglutination of sand, fragments of coral and shells; these beds are also found along the western coast at Galle and other places, between high and low-water mark, in horizontal layers. "At Jaffna the lower portions of the breccia are quarried for building purposes, being very compact in its structure, abounding in perfect remains of shells and coral, resembling very much the same kind of rock in which human remains have been found on the coast of Guadaloupe."[3] Along the shores of the

[1] This variety of gneiss is caused by the mica being replaced by hornblende, which contains a quantity of iron, to which it owes its red colour. The name is derived from the ancient quarries of Syene, in Egypt, which furnished the beautiful stone used in Egyptian statues, but Indian syenite has no resemblance to it except in name.

[2] Tennent, i. 16.

[3] Gardner.—"The island of Guadaloupe has long been celebrated for containing embedded in a limestone rapidly forming on the coast fossil remains of human beings, fragments of pottery, and ornaments of stone and wood. Similar formations are taking place at Ascension and Madeira." Ansted, Geol. ii., 137. Abu-Zaid, the Arabian, mentions the existence of fossil lobsters in India, but it would be difficult to say which part he was alluding to. "Un animal de mer qui ressemble à l'écrevisse; quand cet animal sort de la mer il se convertit en pierre. On ajoute que cette pierre fournit un collyre pour un certain mal d'yeux." Voy. Arab., p. 21. With the exception of a few shells, all modern species, and some bones of animals and elephants' tusks, found a few feet below the surface on the banks of the Kalu Ganga, there is a remarkable absence of fossil remains in Ceylon, or any indication that the island has been subjected to great geological changes.

lagoons about Jaffna this substance may be seen in various stages of formation, specimens consisting of entire masses of minute shells similar to those found alive within the tidal range. In other parts of the island fragments of garnets and various gems carried down from the mountains have been found incorporated with it. At Galle a somewhat similar rock is used for building purposes, but the shells, of which it is composed, are more commingled. At one of the places, where it is quarried about a mile from the sea, and six or eight above its present level, numerous oyster-shells, similar to those found alive on the rocks washed by the sea, are found firmly attached on removing the alluvial soil which covers it. Along the shore between Colombo and Negumbo, there is a bed of yellow sand agglutinated into stone by carbonate of lime, on which the sea breaks heavily in bad weather.

Volcanic Symptoms.—"Beyond the very slightest symptoms of disturbance, earthquakes are unknown in Ceylon; and although its geology exhibits little evidence of volcanic action, with the exception of basalt, which makes its appearance at Galle and Trincomalee, and occasionally presents an appearance approaching lava, there are some incidents which seem to indicate the vicinity of fire, such as the occurrence of springs of high temperature at Badulla, one at Kitool, near Bintenne, another near Yavi-Ooto, in the Veddah country, and a fourth at Cannea, near Trincomalee; also one has been heard of recently near Batticaloa. The water in each is so pure and free from salts, that the natives make use of it for all domestic purposes."[1] The warm springs of Cannea, seven miles from

[1] Tennent, i. 16. Basalt is supposed by some geologists to be identical or analogous to the lava poured out by modern volcanos. Ansted, ii. 203. Sir E. Tennent quotes a Spanish author, Argensola, in his "Conquista de las Molucas," Madrid, 1609, who says Ceylon was volcanic, producing liquid bitumen and sulphur. "Fuentes de betun liquido y volcanes de perpetuas llamas que arrojan entre los asperagas de la montana losas de azufre," lib. v. p. 184. It is needless to say this is quite imaginary. Vol. i. p. 16.—Strangely enough the English translation of Argensola, published in 1708, translates this passage without any comment, saying, "There are springs of liquid bitumen, and burning mountains continually blazing and throwing out clods of brimstone among the hills." P. 122.—It is very probable that Argensola was confounding Ceylon with one of the Philippines called Zelon, by Pigafetta, the

Trincomalee, are very remarkable, rising in seven wells, of various sizes, within a walled enclosure of forty feet in length by eighteen feet in breadth. The water is pure, except a slight trace of muriate of soda (common salt), some carbonic acid gas and azote. The temperature is unequal in the different wells, ranging from 86° to 112° Fahr. These springs are much resorted to by natives suffering from cutaneous and rheumatic affections. The water is applied by affusion, the patient standing on a stone slab while the water is poured over him. The tepid springs at Badulla, more than a thousand feet above the sea, have a temperature of from 76° to 86° Fah., and are held in equal veneration by Mahometans, Hindus, and Buddhists, having numerous legends connected with them. The spring near Bintenne constantly emits air-bubbles, and that at Alootoowera has a temperature sufficiently high to cook food.

Dr. Davy points to another indication of volcanic agency in the sudden and great depth of the harbour of Trincomalee, which, in the centre, is said to have been hitherto unfathomable to ordinary sounding lines; but the water is very deep all about the coast.

In several parts of Ceylon the gneiss is intersected by veins or dykes of trap or basalt rocks, which have forced their way, in a molten state, through the gneiss from below; they may be seen on the beach at Trincomalee, on the ascent of Adam's Peak from Ratnapoora, and close to the sea on the hill which overlooks Galle. The latter consists of pitch-stone porphyry, highly impregnated with iron, and the effect which it has produced in altering the nature of the gneiss when it has come in contact with it is very remarkable.

It does not follow from the presence of these trap veins in the gneiss that they are in any way connected with a focus or centre of eruption, or of direct volcanic action, although they are of igneous origin, and present all the characters of lava,

modern Mindano, which is volcanic; the name still survives in the town of Silangan, or perhaps it was part of the old confusion between Ceylon and Sumatra, which has a volcanic mountain.

being found similarly situated in many countries far removed from any volcanic neighbourhood.

Gneiss.—The chief feature in the geology of the island is the abundance of gneiss. Whenever the under-surface of the gneiss is sufficiently exposed, it is always found to rest on granite; but owing to the great thickness of the gneiss in Ceylon, it is only very much broken up by the granite in the mountain district. The mechanical structure of gneiss shows that it has been formed at the expense of granite by disintegration, much in the same way that the sandstone of the carboniferous system has had its origin, being partly fused by heat from below. Sir C. Lyell says that granite itself has been formed by the complete fusion and reconsolidation of pre-existing stratified rocks, and that as new stratified rocks are slowly deposited by water beneath the ocean, the older ones, which they cover, are gradually reabsorbed by the interior heat of the globe, and converted into granite. From this circumstance he applied the term "metamorphic" to those lower stratified rocks previously known as "transition." This theory, propounded many years ago, is supposed to be verified by the recent discovery of remarkable red clay and white mud deposits dredged up at great depths from different parts of the bed of the Atlantic, formed by minute jelly specs known as globigerina. The non-existence of secondary and tertiary rocks overlying the gneiss and dolomite prove that from the period of the first elevation of the island above the ocean it has not undergone any of the submersions and upheavals to which those parts of the world where they are found have been subjected. There is no evidence to prove that the gneiss has even once been covered with water since the time when it first became dry land; nowhere are there any traces to be met with of diluvium or diluvial drift caused by a deluge of water rushing over the land.

"In the many cuttings through the gneiss for the purpose of forming roads in the island, the various bendings, elevations, and depressions to which it has been subjected since it was deposited in the bed of a primeval ocean can be satisfactorily studied. Portions of these rocks are sometimes of a very

arenaceous character, so much so as to cause them to be taken for actual sandstone by ordinary observers; these portions can always, however, be traced running into the regular and more compact gneiss; extensive veins of both pure quartz and felspar are often met with in the gneiss, and probably have been produced by the same cause to which mineral veins owe their origin, viz., a fissure which has been filled up from the surrounding rock by chemical and electrical action long and steadily continued. Those chalk-like deposits which are met with at Newera Ellia and elsewhere are formed by the disintegration of felspar veins and form the substance called kaolin, or porcelain clay."[1] The gneiss and granite in some places so abounds in adularia, it may be called felspar rock. Mica does not generally prevail in the gneiss of Ceylon, but when it predominates it looks like mica slate. Black or graphite granite is found at Trincomalee: the quartz and felspar in it is black or gray, and very crystalline.

The Fort of Colombo is built on a very hard and close-grained variety of gneiss, containing a large amount of iron not very equally distributed, and stratified by veins of quartz; in some localities great part of it is in a state of disintegration and can be easily dug into.

In consequence of the unequal decomposition of the gneiss, prodigious masses of rock, which have resisted the disintegrating action of the atmosphere, lie above the surface of the surrounding country in several parts of the island. Through the curvature of the strata of which they are composed some have assumed a rounded form and look like small hills; the most remarkable of them is the rock of Dambool, forty-five miles north of Kandy, which is more than 2,500 feet long and 550 feet high, presenting a bare and black appearance. On the south-eastern side, about 350 feet above the plain, is a vast cavern, in which the Buddhists have constructed one of their finest temples. A steep road leads up a shelving side of the rock to the entrance. From the top of the Dambool rock, which in many places is rapidly decomposing, a distant view of the hill of Segiri is

[1] Gardner.—The fine sandstone appearance of some gneiss proceeds from the crystals of quartz, being very small and resembling grains of sand.

obtained, standing straight up in the plain like part of a huge column. The town of Kurnagalla is built close to the largest of all, being about three miles long and 600 feet high. Laterite caverns are also found in India. There is one two miles from Mangalore, on the side of a perpendicular rock, which is said to lead all the way to Hydrabad, a distance of 450 miles; the opening is about six feet from the ground, and was at one time inhabited by a Mahometan recluse. The Brahmins have constructed temples in others at Beder, and the southern Maharatta country.[1]

"The concentric lamellar strata of the gneiss sometimes extend with a radius so prolonged that slabs may be cut from them and used in substitution for beams of timber, and as such they are frequently employed in the construction of Buddhist temples. At Pigalla, on the road between Galle and Colombo, within about four miles of Caltura, there is a gneiss hill of this description on which a temple has been built. In this particular rock the garnets usually found in gneiss are replaced by rubies, and nothing can exceed the beauty of the hand specimens procurable from a quarry close to the high road on the landward side, in which, however, the gems are, in every instance, reduced to splinters."[2]

Dolomite.—As in most countries where the gneiss prevails, immense deposits of crystalline limestone are found in various parts of the island overlying the gneiss, and it occupies a large surface in the valleys of Matele and Peradenia, where it is converted into lime for building purposes, but in the maritime provinces lime is made from coral obtained on the shores at low water mark. This limestone stratum has evidently been formed by aqueous chemical deposition from an ocean which overlaid the gneiss before its upheaval; its highly crystalline structure is probably owing to the same heat which partly fused the gneiss itself previous to solidification; it is not simply a carbonate of lime, but contains also a considerable quantity of carbonate of magnesia, a combination usually called dolomite (or magnesian limestone), by geologists who consider that magnesian vapours formed from the mag-

[1] Journ. R. A. S., 1846. [2] Tennent, i. 17.

nesia in the gneiss, are forced through the overlaying rock, originally perhaps a simple carbonate of lime, by volcanic agency. Dolomite was formerly a monopoly of the kings of Ceylon, which implies that the natives were unaware of the existence of the large deposits of it now found in the island.

Laterite.—One of the peculiarities of some parts of Ceylon is the immense quantity of the substance called cabook by the Sinhalese, or laterite, which tinges the soil of whole districts on the western coasts a deep red colour, and is very remarkable in the neighbourhood of Galle and Colombo, contrasting vividly with the bright green of the trees. The cotton clothing of Europeans and natives is quickly stained with the fine red dust proceeding from it, which penetrates every crevice.

Various causes are ascribed as to the origin of the mineral called laterite, which appears to be nothing more than the result of a complete disintegration of the gneiss. There is no difficulty in tracing a continuous connection between the soil and the laterite on one hand, and the laterite and solid rock on the other. The further one digs down on a bed of cabook the harder it becomes, showing that decomposition is going on. "In no part of the world save in India can a similar decomposition of gneiss be seen, which renders it probable that the cause is due to some peculiarity in the chemical nature of the rock itself." [1] Many geologists suppose it to be the produce of heat or volcanic origin, being placed by Sir C. Lyell among the trap formations; "by some the transformation is ascribed to the action of particles of magnetic iron ore that have been disseminated through the rock which has undergone the change, and the phenomenon has been explained not by recurrence of mere weathering, which is inadequate, but to the theory of catalytic action, regard being had to the peculiarity of magnetic iron in its chemical formula." [2]

From whatever cause it proceeds, so deeply impregnated are the gneiss rocks of Ceylon with oxides of iron that their decomposition takes the colour which the oxides give, hence the variegated appearance and variety of colour, red, white, and yellow, in the laterite; even some of the garnet crystals

[1] Gardner. [2] Tennent, i. 18.

are so saturated with iron that they decompose: entire hills of rock are so soft they can be cut with a knife. Laterite is made up of quartz, felspar, and mica, but the felspar changes its hard crystalline form into a soft creamy substance, easily broken down when rubbed in the fingers; on subjecting it to the action of water the whole of the felspar can be separated, forming, when dry, a fine argillaceous clay similar to Cornwall clay or kaolin stained red with a peroxide of iron.[1]

Cabook is the common building material about Colombo; it is dug out of the quarry in a soft state in pieces about four times the size of a brick, and hardens very much with time and exposure to the air, becoming covered with a kind of glaze, resuming, as it were, something of its former rocky nature. When clays, strongly ferruginous and soft from saturation with water, are dried, the iron previously held in solution by the water is deposited between the particles, and cements them into a hard compact rock; hence the induration of laterite clays. Laterite is found in parts of Bengal, Burmah, Sumatra, and the islands in the Straits of Malacca.

Forests.—Seven-eighths of the whole island are still covered with jungle more or less dense, the north-eastern part between Kandy and Trincomalee being the most impenetrable, and where the aboriginal Veddah still hides himself in those vast solitudes.

Patenas.—One of the peculiarities of the mountain districts are the solitary open spaces of grass which appear at intervals among the dense forests on the sides of mountains or bottoms of valleys. While standing on an elevated position and surveying the country spread out beneath you, they appear like islands in the sea of foliage, and agreeably diversify the uniformity that would otherwise prevail in the landscape. They are of all sizes and shapes, varying from a few acres to many thousands, and closely covered with lemon grass (*Andropogon*) whose strong perfume fills the air in some places with an overpowering odour. This grass is very coarse in texture, and being unpalatable to cattle when much grown, is continually set on fire in order that they may eat the young shoots which

[1] "Report on the Wells of Colombo," Blue Books, 1864, xliii.

spring up after. In the neighbourhood of Pusilwa, where these grassy expanses are very extensive, the burning herbage resembles the prairie fires of America, and spreads over the sides of the hills in long lines of fire and smoke.

In the higher regions of Newera Ellia and the Horton plains the grass loses its perfume and is more stunted in its growth. The strangest thing about them is the sudden manner in which the trees and underwood are separated from the grass, as if they were artificially divided by a fence, and the unfertile nature of the grass land compared to that where the trees grow; the forest land which borders a Patena when cleared is found capable of producing abundant crops of vegetables, but the Patena will yield no produce without an amount of pains and manure which will not repay the outlay, as long as any of the forest remains to be cleared.

The Patenas are evidently natural formations, but their cause has not been ascertained; the soil in many parts is of a boggy nature and black colour, and said to be largely impregnated with oxides of iron, and contains a quantity of quartz, to which may probably be traced the absence of trees. Humboldt[1] was disposed to "ascribe the origin of the Pampas of South America to the custom of setting fire to the woods when they wanted to convert the soil into pasture;" however, the natives of Ceylon are not in the habit of setting fire to the forests, although they set fire to some of the Patenas; the only vegetation found on them besides the grass are rhododendrons and one or two other shrubs, the *Careya arborea* and *Emblica officinalis*. In the valley of Newera Ellia the rhododendrons grow a large size.

On the low lands of the eastern coasts are another species of opening in the forests called Talawas by the natives. The trees of the surrounding forests do not entirely avoid them, as in the Patenas, but are thinly scattered here and there over the surface, resembling an English park on a grand scale; the soil and grass are different from the Patenas, affording abundant pasture to the troops of wild deer which frequent them.

Rivers.—In consequence of the high mountains of the

[1] Narrative, ch. vi., quoted by Sir E. Tennent, i. 23.

interior intercepting the vapours of the Indian Ocean, showers are frequent in this part of the island, and springs abundant, which gives rise to many rivers; nine or ten, of considerable magnitude, empty themselves into the sea on the south and west coasts, and as many more on the south-eastern shores, including the Mahavilla ganga, the largest in the island. Rising, as most of them do, in a lofty and extensive mountain region, full of narrow defiles, their early course is very impetuous, forming numerous rapids and waterfalls, some of which are very grand, and the scenery through which they pass exceedingly beautiful, but are often hid in the landscape in consequence of the dense forests and jungles which line their banks. As they approach the sea they become wide and sluggish, and shaded by thick groves of screw-pines (*Pandanus odoratissimus*), mangroves (*Rhizophora*), and tamarisks, where they are swarming with crocodiles. Formerly few were navigable, unless by flat-bottomed boats or small canoes, and then only for a few miles from the coast, except the Mahavilla ganga, which is navigable to the neighbourhood of Bintenne, where it is five feet deep, and five hundred and forty feet wide.

They are subject to sudden and great inundations during the monsoons. The Mahavilla ganga has been known to rise more than thirty feet in a few days, and the Kalany ganga, in 1837, carried away the bridge of boats at Colombo, along with many hundred houses. In the flat coast districts they spread over a great extent of country, and the slime and moisture they leave behind, under the influence of the sun, creates malaria.

The Mahavilla ganga, which has a course of one hundred and thirty-four miles, after rising in the southern mountains, flows northward through the Vale of Kotmalee, and over the magnificent falls of Rambody, making a detour to the east near Kandy, through a succession of rapids. Again, turning northward at Bintenne, it empties into the sea twenty-five miles south of Trincomalee by several branches named the Virgel and Kottiar ganga. The Kalany ganga rises in the north-east side of Adam's Peak, and after flowing northwards some distance, turns westward and enters the sea three miles north

of Colombo, its course being eighty-four miles, and is navigable as far as the Ambogammoa Mountain. The Kalu ganga rises south of Adam's Peak, and joins the sea near Caltura; it is full of rapids about Ratnapoora, but is navigable as far as this town, and much produce is brought from the interior in flat-bottomed boats. This river passes through some of the richest scenery in the island. The Maha oya, or Negumbo river, rises west of Gampola, and has a course of seventy miles. The Wallaway oya, or Hambantota river, rises near Adam's Peak, and flows south for seventy miles. The Kirinde oya, or Mahagam river, rises near Nammoonecoole, and also flows south for sixty miles. The Kombookgam and Manick ganga, of equal size, rise in the same neighbourhood, and flow south-east. Besides these, there are several rivers in the northern plains, the principal being the Aripo river, or Malawatta oya, about sixty miles long, the Kalawa oya, near Calpentyn, and the Aar, on the north-east coast.

The lengths of the principal rivers are as follows :—

	MILES.	EMBOUCHURE.
Mahavilla ganga . .	134	25 south of Trincomalee.
Kalany ,, . .	86	3 miles north of Colombo.
Kalu ,, . . .	76	Caltura.
Aripo River . . .	60	Aripo.
Kirinde oya . . .	60	Mahagam.
Wallaway . . .	70	Near Hambantota.
Gindura	60	North of Galle.
Maha oya . . .	70	Negumbo.
Dedera oya . . .	68	Chilaw.
Patipal Arr . . .	50	South of Batticaloa.
Kalawa oya . . .	50	Near Calpentyn.
Madura oya . . .	49	North of Batticaloa.

Recently the following rivers have been rendered navigable for small boats :—

The Matura River for . . .	28	Miles.
The Kalu ganga ,, . .	60	,,
The Kalany ganga ,, . . .	45	,,
And the Gindura ,, . .	30	,,

Lagoons and Currents.—Sir E. Tennent attributes the formation of the lagoons and sand banks on the coasts of Ceylon "to the quantity of alluvial matter brought down by the rivers, which, meeting the powerful currents round the

coasts, gets thrown back on the shores, where the stilt, in some places, is piled up in heaps, causing the rivers to form new outlets and lagoons; while on the south-eastern side of the island the heavy surf helps to keep the stilt of the rivers from the coast."

Their formation must be traceable to some other cause. As at Batticaloa, the principal of them, there are no rivers, but only one or two streams running into the sea, and the water is deep on the coast, which circumstance is opposed to the formation of sand banks from the action of ocean currents, which, when they are lateral, carry off sediment from rivers, as explained by Sir C. Lyell in his "Principles of Geology." Some of the sand-hills on the southern coast may be traceable to the wind blowing the sand up on the shore.

Dr. Gardner attributes these lagoons to the gradual elevation of the shores of the island, already alluded to, which seems a more likely cause than the other.

On a careful examination of Horsburgh, it will be seen that the deposits left by the currents are confined to the formation of mud and sand banks in the sea on some parts of the coast, and the filling up of Palk's Bay. The only land raised above the sea by their action appears to be Adam's Bridge, and perhaps the island of Manaar. The course of the currents appears to be very irregular, often running away from the coasts instead of near them. On the east coast the current sometimes sets very strong to the north during the south-west monsoon, but more frequently to the east, which carries vessels out to sea from the coast. "A dull sailing ship, passing round the east side of Ceylon at a distance in the south-west monsoon, could not make the Coromandel coast till north of Madras."[1] On the eastern coast the currents are very variable, but in February and March they run northward. In October and November a strong current, two miles an hour, running south along the east coast, following the direction of the land, passes sometimes round as far as Galle and Colombo. The great depth of water off Dondra Head is attributed to the powerful

[1] Horsburgh, East India Directory, p. 560, 551.

currents, four or five miles an hour, which sweep across it in opposite directions during the monsoons.

The Malabar current from Bombay to Cape Comorin runs south with the north-east monsoon, and north with the south-west monsoon; during the north-east monsoon it joins the Bengal current coming through the Paumban passage, and proceeds westwards towards the coast of Africa through the Maldives at the rate of thirty miles in twenty-four hours.

The word "Gobb," or "Aghbab," employed by the Arabians in describing Ceylon, appears to be a word capable of several interpretations, and means either a gulf of the sea, a lagoon, a valley, or a grove. Sir E. Tennent finds fault with the English translation of the "Two Mahometans," in Pinkerton's Collection of Voyages, viii. 218, where it is rendered as a "valley," and accepts as more correct M. Reinaud's French version, which makes it a gulf, or arm of the sea, and concludes the Arabians, when speaking of "gobbs," were alluding to the lagoons just mentioned in the south of Ceylon;[1] but in a recent French translation of Khordadbeh's "Book of Routes," "ghobbs" are described as "spacious valleys extending towards the sea, where the largest elephants in the island were found."

In Sir Henry Elliot's translation of the "Book of Routes," "aghab" is rendered as the name of a town.

[1] "Cette île, Serendib, dépend des terres de l'Inde ainsi que les vallées (Aghbab) par lesquelles se déchargent les rivières et qu'on nomme vallées de Serendib ; les navires y mouillent et les navigateurs y passent un mois ou deux dans l'abondance et dans les plaisirs."—Jaubert, Edrisi, tome i. p. 73.

"En face de l'île de Serendib du côté de la terre de l'Inde il y a des gobbs, c'est à dire des golfes, dans lesquelles se déchargent certaines rivières ; on nomme ces gobbs les gobbs de Serendib. (Les navires pénètrent dans ces golfes et les franchissent en un ou deux mois, à travers des bois et des jardins, au milieu d'une température moyenne.)"—Reinaud, Voy. Arab. pref. lxvii. ; quoting Jaubert, Edrisi, tome i. p. 73.

"En face de cette île il y a de vastes gobbs—mot par lequel on désigne une vallée quand elle est à la fois longue et large, et qu'elle débouche dans la mer ; les navigateurs emploient pour traverser le gobb appelé gobb de Serendib deux mois, passant à travers des bois et des jardins. C'est à l'embouchure de ce gobb que commence la mer de Herkend."—Voy. Arab. 129.

[2] M. Meynard, Jour. Asiatique, 1865, p. 289, says in a note, "Les géographes Arabes nomment ainsi des vallées spacieuses et étendues qui s'avancent dans la mer."

It will be seen in the various French versions of the Arabian writings on this subject, just given, that the "ghobbs" are described to be in that part of Ceylon opposite to the coast of *India*, or the north, while the lagoons Sir E. Tennent applies the description to are in the south. M. Reinaud, in his introduction to the Geography of D'Aboulféda and "Voy. Arab.," says the Arabians were speaking of the Paumban passage, and that part of their vessels passed that way; and in quoting Jaubert he has added the words, between brackets, about "vessels passing through woods and gardens," which are not in the original text of the Abbé Renaudot.

In Catafago's Arab dictionary "ghab" is a forest or grove, from which it seems the Abbé Renaudot's version is correct. He says, "A l'extrémité de cette île il y a de grandes vallées fort longues et fort larges qui s'étendent jusqu'à la mer; les voyageurs passent deux mois dans celle qu'on appelle 'gab' Serendib à cause de la beauté du pais, qui est couvert d'arbres et de verdure, avec de l'eau et des prairies; l'air y est fort bon. Cette vallée a une ouverture qui donne sur la mer appelée de *Herkend*; elle est fort agréable."[1]

Many of the statements of the Arabians are so obscure, it is not very easy to make out what they mean; besides, some physical change may have occurred on the northern coasts since they wrote, which would increase the difficulty.

The Dutch joined several of these lagoons in the south by canals, forming an inland navigation from Putlam to Negumbo and Pantura, and also at Batticaloa, where they are still navigable for small vessels a distance of eighty miles; but the canals about Colombo had been filled up with sand for many years, until 1855, when the work of clearing them was commenced, and in 1864 one hundred and fifty miles of inland water communication between Caltura and Calpentyn was restored.

Salt Pans.—At Putlam, on the west coast, and on the eastern shores south of Trincomalee, salt is made in great quantities where the soil is a clay, or of retentive nature, in which salt pans are formed by raising a shallow embankment

[1] Anciennes Relations, etc., p. 104; *vide* ch. xi.

to retain the water, when it is poured into them, and left until it is evaporated by the heat of the powerful sun, leaving a crust of salt on the surface, which is then scraped off. The sea-water is raised by buckets, and poured at first into a receptacle, where it is allowed to remain some time until the sand settles at the bottom, when the clear water is let into the pans. Made in this way, the salt is of a better quality than that formed by merely damming up a shallow part of the sea. The natives employed in collecting the salt wear a piece of buffalo skin round their legs and feet to prevent the salt galling them.

Roads and Bridges.—Cordiner says, when the British arrived in Ceylon, in 1796, there were, strictly speaking, no roads, wheeled vehicles being only used in the vicinity of the larger Dutch settlements; the few roads in the interior were so rugged and steep the passage of a wheeled conveyance was almost impracticable,[1] stores and ammunition being carried on coolies' backs." Before the British were forty years in the island, all the chief towns were connected with good roads, one, with a few breaks here and there, passing all round the coast, a distance of seven hundred and sixty-nine miles. There was, however, a deficiency of bridges, those constructed being made of wood, and chiefly on the Galle and Kandy roads. Of late years the Government have made many new bridges, some of them being iron trellis; a bridge of boats crosses the Kalany near Colombo. That at Peradenia near Kandy is composed of satin wood, sixty-seven feet above the river, and having a span of two hundred and five feet, and a fine suspension bridge is thrown over the Mahavilla ganga at Gampola, where there was formerly a ferry, which was the usual manner of crossing rivers.

The old native paths and bridle-roads through the jungles for communicating with villages and hamlets, in defiance of engineering art are run straight up and down over the hills and mountains, in some places excessively steep. Dr. Hooker, in his "Himalayan Journal," makes the same remark with regard to India.

According to a return of the Chief Commissioner of Roads in

[1] Vol i 15; ii 172.

1863, given in the Governor's report (Blue-books, 1863, xxxiii., 139), there were of first-class metalled roads, five hundred miles; second-class carriage roads, not macadamized, eight hundred miles; indifferent carriage and bridle roads, six hundred—total, one thousand nine hundred. The expense of keeping them in repair is heavy, especially between Kandy and Colombo, in consequence of the great traffic from the coffee plantations.

Native Suspension Bridges.—The Siṇhalese have very cleverly turned to account rattan plants in the formation of flying bridges over narrow streams as they foam through ravines and jungles, often one hundred feet below; the rattans are passed and braced to and from trees growing on the banks, the platform is made of slight bamboo, with a fragile hand-rail on each side, and a wooden ladder is placed at the ends to enable the passenger to mount the bridge, which is elevated above the road way. They are very picturesque, and although so slight in structure are remarkably strong. Dr. Hooker mentions these rattan bridges in the Himalayas, also curious living bridges formed with the aërial roots of banyan, which are trained to interlace with each other over a stream.

Railways and Telegraph.—There is only one railway in Ceylon, that between Colombo and Kandy: it was originally surveyed by Mr. Doyne, in 1848, who proposed that there should be stationary engines on the steepest gradients, but it was found afterwards they could be dispensed with, the gradients in the low country being one in a thousand and one in fifty in the mountains, except in some places, which are one in forty The whole line, seventy-five miles in length, runs through laterite and granite formations, and was entirely constructed with imported labour under very great difficulties, passing through some of the most unhealthy parts of the island, from malaria, which interrupted the works at the Maya oya river for a long time. There are ten stations and ten tunnels, the longest being three hundred and sixty-five yards; the Kadugannawa incline is so steep it requires three engines for twenty waggons. White ants have been found very destructive of the fences, and wild buffaloes trespass so

often on the line, the engines require "cow catchers." The cost was £1,436,127 or £19,148 per mile, considerably below the estimate of £2,214,000 or £27,675 per mile, but some additional expenses have made the total cost of the whole £1,800,000; it was made by the government of the Colony with surplus revenue and loans. Forty-six miles were opened for traffic in November, 1866, and the remainder in 1867. It promises to be a very remunerative undertaking, 180,984 passengers, with 116,176 tons of goods, being conveyed in 1868; the revenue in 1869 was £180,000 in round numbers, leaving a net profit of £60,000 after paying working expenses of £72,000, interest, &c.[1]

Ceylon is joined to the Southern Indian Telegraph line by one through the Paumban passage fifty-three miles across, hence to Kandy by the northern road, then to Colombo and along the coast to Galle. In 1862, three hundred and eight miles of wire were laid at a cost of £21,519.

Adam's Bridge and the Paumban Passage.—The "Ramayana" describes Ceylon as separated from the main land by the sea, and attributes the formation of the reef which nearly unites them to the labour of Ráma and his monkeys, by which means he was enabled to cross over and invade the island in search of his wife Sitâ. Notwithstanding the fabulous nature of this recital, it shows that the remarkable reef, known as Adam's Bridge, has been in existence from time immemorial. Valentyn says the name was given by the Portuguese, but this is a mistake, as it can be traced to the Mahometan Arabs, who say Adam made it on his way to Heaven *viâ* Ceylon and the Peak. It is known to the Hindus as "Ráma's bridge," and the honour of its formation is also claimed by the Brahmins for Siva, but as this deity in his endless incarnations has sometimes assumed the part of Ráma, it is often difficult to distinguish one from the other.

The term Adam's Bridge does not appear to have been given by the Arabians until the time of Albyrouni (1030 A.D.). Khordadbeh (850 A.D.) in his "Book of Routes," calls it

[1] Reports in Blue Books, 1870, xlix., 1871, lxii.; Report by Mr. Hawkins, 1860, xlv.

"Set Bandhai," or bridge of the sea, and a general name of "Mabar," a passage or ferry, was given by them to this part of Southern India.[1]

The bridge is a natural formation of sand and sandstone, projecting at intervals above the sea, having about the Paumban passage the appearance of an artificial construction.[2] The reef is not continuous between the continent and the island, the interval between them, a distance of fifty-three miles, being partly occupied by the inlands of Ramiseram and Manaar, which divide the reef into two portions, the Paumban passage being in that part of it between the island of Ramiseram and the Indian coast; here the reef connecting them is 2250 yards long, and the opening through which vessels pass about forty yards wide, all the others being much narrower. The Indian shore, which runs out into a point in this place, is exceedingly flat and little raised above the sea.

Some years ago, before the Madras Government in the interest of their commerce deepened the passage, there was only six feet of water on the dam, but now it reaches ten, and many Coromandel dhoneys pass this way; however, the sand banks with shallow water on them which form on each side of the dam, will always prevent the passage being made very deep unless at a great expense.

The records of the Pagoda at Ramiseram relate that it was joined to the continent by a narrow neck of land until 1480 A.D., when a breach was made in it by a storm, subsequently enlarged by succeeding storms. If this be the case, it follows that vessels previous to the 15th century passed through openings in Adam's Bridge properly so-called, or the sand reef between Manaar and Ramiseram, and not the Paumban passage as is generally supposed.

That they were joined as related is exceedingly probable. There is a marked difference in the structure of the Paumban

[1] Elliot, Hist. Ind., i. 66; Reinaud, Mém. sur l'Inde; Kazwini, quoted by Sir W. Ousley; D'Herbelot, Biblo. Orientale. (*Vide* ch. x.)

[2] Report on the Paumban Passage, by Major Sims, 1828; Captain Cotton, 1822; and Capt. Stewart, J. Geog. Soc., vol. iv., v., 2; Blue Books, 1873, xlix. 9. The project of making a canal (at a cost of £1,372,810) has been again revived.

dam or reef, and Adam's Bridge; the Paumban reef is formed of sandstone rock resting on a bed of gravel or conglomerate which has been raised from the sea, while Adam's Bridge is a sand ridge, formed by the alternate action of currents running opposite ways during each monsoon, which have thrown up the sand at this point; it has been probed to a depth of thirty-two feet without reaching any underlying rock, the reef is thirty-two miles long and a quarter of a mile broad, with six fathoms of water on either side.

In consequence of the growing character of the reef and the gradual rise of the land, we may conclude that the water on it was not so shallow many centuries since as it is now; previous to the improvement of the Paumban passage, native vessels at times passed through the openings in Adam's Bridge. There are many proofs that the land in the vicinity has risen; in 1845 an antique iron anchor was found under the soil at Jaffna of such a size and weight as to show it must have belonged to a vessel of larger tonnage than any which could pass that way now, also immense deposits of dead chank shells were discovered in the tidal flats of Jaffna in 1821, in a stratum of blue mud about eight inches thick. Eighty millions of them have been dug out since they were discovered without exhausting the supply (*Vide* ch. xxix.) Again, a perceptible difference in the depth of the water in the neighbourhood has been remarked by Captain Phipps, master attendant at Tutocorin during his time. Although Pliny (vi. 24) mentions that vessels in sailing over these seas broke off pieces of coral coming in contact with their rudders, he also says some parts were so deep no anchor could reach the bottom. Albyrouni says, in his time the passages in Adam's Bridge were four parasangs wide,[1] which would be equal to sixteen miles. If there was an opening so wide as that, it must have been between Manaar and Ramiseram. Baldæus relates an improbable story about a number of Portuguese frigates escaping from the Dutch by sailing through the passage, and that the natives could remove the stones.[2]

Captain Newbold, F.R.S., in an article on the geology of

[1] Reinaud, Mém. sur l'Inde.

[2] Chur. Coll. Voy., iii. 709.

Southern India, (J.R.A.S. 1846), says: "On the eastern coast near the southern extremity of the peninsula are some beds of sandstone resembling that of Pondicherry, containing shells existing in the adjacent sea; it also occurs in some cliffs on the coast of Ramnad and stretches across the straits to Ceylon as a low interrupted ridge, partially covered at high water mark, some of the more solid portions forming two hills in the islands of Manaar and Ramiseram, the intervening portions are marked by a chain of sand banks, based there is reason to believe on the same sandstone. This singular barrier of rocks once formed the bed of the sea, subsequently elevated to its present position. The strata are perfectly horizontal and rest on a bed of gravel, in some places consolidated into a conglomerate. The natives have a tradition that the low country of Ramnad as far as Madura was once covered by the sea, to the extent of seventy miles inland. The sea has submerged parts of the Coromandel coast south of Madras, where Chinese and Roman coins are cast on the beach after a storm, while at the same time there is an elevatory movement in other parts, also on the Malabar coast."

Many examinations and reports have been made on the Paumban passage with regard to the feasibility of making it deeper, or forming a canal so as to save vessels being obliged to make the detour of Ceylon in order to reach the Coromandel coasts, but nothing has been done beyond the partial deepening mentioned. In the Report of the British Association for 1871, Commander A. D. Taylor, an officer who has given much attention to Indian hydrography, gave an historical sketch of the discussion that has been going on for the whole of the present century on the subject, but does not approve of the project. Sir J. Elphinston, as a practical seaman, had investigated it, and came to the conclusion it would not answer for large vessels; however, he discovered a well-sheltered anchorage in five or six fathoms extending over an area of five square miles, about half a mile from the Indian shore between Mostafeetta point and Moosel isle. (See note, p. 59).

Manaar and Ramiseram.—Ramiseram is celebrated for con-

taining a great Hindu Pagoda, one of the largest in southern India, where hordes of pilgrims assemble every spring in honour of Rama; there are two large and ancient tombs here which the Mahometans say are those of Cain and Abel. Sir A. Johnson supposed Ramiseram to be the "insula solis" of Pliny and likewise the meridian of Hindu geography.[1]

Manaar, which is the Epiodorus of "Periplus" and Marallo of "Cosmas," is a well-built village in the island of the same name, and of great importance in the early ages. The soil of the island is chiefly sand and small shells.

Peninsula of Jaffna.—This part of Ceylon presents some of the peculiarities of coral islands. The whole district has been formed of madrepore turned into breccia, as in coral reefs, "where large masses of limestone are formed by the stony skeletons of zoophytes and shells cemented together by carbonate of lime, part of which is probably formed in sea water by the decomposition of the corals."[2]

Many parts of the peninsula are not ten feet above the sea, and intersected by shallow lagoons, and there are no rivers, but many wells are sunk in the breccia for irrigation; among them is one very remarkable, at Potoor, 144 feet deep and thirty feet in diameter, which emits sulphuretted hydrogen, the water is fresh on the surface and salt forty feet below, and the natives say it communicates with the sea at Kuremalee, seven miles distant, by an underground channel; this well is inexhaustible, a powerful steam engine, erected in 1824 by Sir W. Burnes to irrigate the vicinity, having failed to make any impression on it. The water in the well rises and falls one or two inches twice in twenty-four hours, ordinarily with the tide, but the movement[3] is irregular. The surface of the ground about it sounds hollow when struck with a heavy weight, it being evidently a subterranean pool. There is a similar well at Tellipalle; when the workmen were sinking for water, at a

[1] Trans. R. A. S., vol. iii.

[2] Lyell, Elem. of Geolo.

[3] J. Ceylon R. A. S., 1865–6; Tennent, ii. 536. Sir E. Tennent quotes Baldæus (p. 810), as saying, "This well was opened by a thunderbolt, referring to a legend of Rama," but Baldæus appears rather to have been referring to the small island of Nedontivoe, now called Delft.

depth of fourteen feet, the breccia gave way and disclosed a pool below thirty-three feet deep.

The presence of abundance of fresh water in these Jaffna wells and also in the Maldives, where in both cases one would conclude the subsoil to be thoroughly permeated with salt from the surrounding ocean, is very curious, and has been the subject of some discussion. Mr. Darwin attributes the presence of fresh water to the rain which falls on the surface; he says, "At first sight it appears not a little remarkable that the fresh water should ebb and flow with the tide; we must believe that the compressed sand or porous coral rock acts like a sponge, and that the rain water which falls upon the ground, being specifically lighter than the salt, merely floats on the surface, and is subject to the same movements. There can be no actual attraction between salt and fresh water, and the spongy texture must tend to prevent all admixture, &c. On the other hand, where the foundation consists only of loose fragments, upon a well being dug, salt or brackish water enters, of which fact we saw an instance at Keeling Islands. There are ebbing and flowing wells in the West Indies. In low isles of small extent and composed of porous material the rain can have no tendency to sink lower than the surface of the surrounding sea, and must therefore accumulate near the surface."[1] Sir E. Tennent has brought some evidence to show that Mr. Darwin's theory is untenable, and that the fresh water in these wells is more likely produced by the filtration of the salt water; he argues that the quantity of rain which would fall on a small islet would be insufficient to yield a good supply of fresh water.

Fresh water deposited in the snape of rain is said to have been found by Buchanan at sea[2] in India floating on the salt; it is remarkable also in Jaffna, as in the Maldives, that salt and fresh water have been found alongside of each other in wells only a few feet apart.

Probably from some inadvertence he calls the breccia in which these wells are found "magnesian limestone," which could not overlay a coral formation.

[1] Jour. of a Naturalist, ch. 22.

[2] J. A. S. Beng., 1835.

The immense quantity of sand found in the arable soil about Jaffna and the islands has excited surprise in consequence of the substratum being coral. Dr. Davy remarks, "It seems extraordinary that in islands the formation of which is calcareous, the soil should be destitute of calcareous matter." He attributed it to two causes, being perhaps washed out of the soil by repeated rains, or the accumulation of sand might be owing to the winds blowing it over the peninsula from the shores, where it is thrown up by the surf and wind in great heaps.

Another remarkable circumstance is the red-brown colour of some of the Jaffna soils. Dr. Davy found on analysis that they contained—

95·5	Parts of silicious sand, with a few particles of calcareous matter.
2·0	Vegetable matter.
2·5	Water.
100·0	

In the island of Delft, a coral isle, the result was nearly similar—

95·0	Parts silicious sand, coloured by iron.
2·5	Vegetable matter.
2·5	Water.
100·0	

The island of Delft, which has a small lake or lagoon in the centre, was evidently originally a coral atoll, similar to those of the Maldives, but now the water of the lake is fresh; this is the only example of the kind in Ceylon.

Mr. Darwin, in his work on coral islands, refers to an account of the north of Ceylon given by M. Cordier to the "Institute," May, 1839, where he describes the madrepore formations about Jaffna as being of immense extent, and belonging to the latest tertiary period.

Tides.—There is little variation in the height of water round the shores of Ceylon, the influence of the tidal wave not being great. The same thing occurs at St. Helena, where the rise and fall is about three feet. The average high water in the

Gulf of Manaar and western coasts occurs at 1 P.M. on full and change, ordinary rise and fall eighteen to twenty-four inches, at spring, thirty to thirty-six inches; the direction of the flood is generally influenced by the wind. At Galle the rise at change and full at two hours is eighteen to twenty-four inches. At the Basses the tide is hardly perceptible. Off the Little Basses a set of tide has been experienced directly to windward, with the wind blowing strong enough to keep a ship quite broadside to it for a couple of hours; strangely enough it has never been felt at the Great Basses. At Batticaloa the tide rises about two or three feet perpendicularly, at five hours on full and change, but not always regular. In the Paumban passage the tides rise and fall two feet during the S.W. monsoon, and about three feet during the first three months of the N.E. monsoon, but is often irregular, being much influenced by the winds, generally setting with them.

There appears to be some irregularity about the tides in Ceylon, and Horsburgh and Admiral Fitzroy do not seem to agree on this point. The Admiral says in his "Weather Book" (p. 377, ed. 1863), "The Indian Ocean appears to have high water on all sides at once, though not in the central ports at the same time; thus it is high water at North-east Australia, at Java, at Sumatra, at Ceylon, the Laccadives, at the Seychelles, on the coast of Madagascar, and St. Paul's and Amsterdam at 12 o'clock, but the Chagos and Mauritius have high water at 9, and at Keeling Islands about 11; here there is much cause for perplexity." Horsburgh says, "it is high water at Manaar at 1 P.M., Galle, 2 P.M., and Batticaloa at five hours on full and change." Sir E. Tennent, unable to account for the discrepant hours at which the tide reaches the shores of Ceylon, wrote to Admiral Fitzroy for an explanation, which he gives as follows:—"Ceylon, as a prolongation of the great Indian peninsula, projects so far into the Indian Ocean as to oppose an effectual barrier to the free and simultaneous action of its waters under the attraction of the moon; hence they may be considered as broken into two independent sections or zones, each with a time peculiar to itself, and a tide-wave moving from east to west, and each more or

less influenced by superadded phenomena, differing essentially according to the local features of the coast. Thus the most easterly tide impinges on the coast of Ceylon, reaching Batticaloa about 4 P.M., Trincomalee two hours later, and hence passing towards Coromandel and Madras. Whilst this wave is pursuing its course the moon has been already acting on the opposite side of India, and forming another tide-wave already in motion towards the coast of Arabia and Africa, consequently withdrawing the waters, and depressing their level in the Gulf of Manaar; but before they can be much reduced on the west they are overtaken by the wave from the east, which arrests their further fall, and limits the change of level to something less than thirty inches."[1]

This does not explain how it happens that there is high water at Galle two hours later than at Manaar; admitting the existence of a western tidal wave moving north-westward, it should produce high water at Galle *first*. If the high water at Galle is caused by the great tidal wave which originates in the Southern Ocean, moving from S.E. to N.W., or E. to W., it should produce high water at Galle about the same time or a little after the eastern coast, which it does not do.

Harbours.—The outline of the coast is singularly even and free from promontories and little indented by bays; there are really no harbours except the magnificent Bay of Trincomalee and the smaller harbour of Galle. Colombo, the chief seaport, has only an open roadstead for large vessels, but is safe all the year; there is good anchorage in seven fathoms two miles off; the bar is a sand-bank, having seven feet of water, on which the sea breaks heavily in bad weather. In 1860 the old light-house was removed from its former position on the Flagstaff Battery to the centre of the town: the light is 132 feet high and visible five and a half leagues; a dangerous sunken rock, called "the drunken sailor," lies south-west one mile from the shore.

The harbour of Galle cannot be entered by a stranger without a pilot, in consequence of numerous coral reefs scattered over the entrance, having from three to fourteen feet of water

[1] Ceylon, ii. 117.

on them. The Peninsular and Oriental steamer, "Malabar," was totally lost on one in May, 1860. The deep water on the eastern coast admits of the near approach of vessels, and tolerably secure anchorage can be obtained at many places all round the island in the offing.

There has been a good deal of controversy as to the comparative merits of Trincomalee and Galle for the chief steam packet station in Ceylon; in the sessional papers of the House of Commons, 1860, there is a report on the subject by Mr. Harrison, C.E., appointed in 1857 to examine them; he says, there are only two ports in the island which have any claims as to size and depth: Trincomalee, the finest in the east, and Galle, which in its then state was difficult of access even by day, and wholly inaccessible at night, and affords insufficient accommodation to the large amount of shipping which frequents it, being, in 1857, 179 steamers of 263,045 tons, and 232 sailing vessels of 81,916 tons, which is annually increasing; there is also a long heavy swell into Galle harbour eight months in the year, and vessels at anchor are occasionally driven on shore.

Notwithstanding these disadvantages he argues at length against the adoption of Trincomalee as a packet station, which would, he calculates, involve a loss in fuel alone of £14,983 per annum to the two chief companies, "The Peninsular and Oriental" and "The Royal Australian Mail Company:" it would also cause a delay of two days to passengers, and lengthen the voyages one day and a quarter. The remedy proposed was a breakwater, 1,200 yards long, at Galle, to be constructed of syenite, an inexhaustible supply of which is obtainable close to the harbour. There is no tendency to silting up at Galle, neither is it affected by the low tide. Some proposals to form a breakwater had been made previously; and since Mr. Harrison's report a loan has been raised and works are in progress for improving the harbour. It was also proposed, in 1872, to form a breakwater at Colombo.

In 1860 or 1862 an application was made by the Peninsular and Oriental Company to transfer the packet station from

Galle to Trincomalee, which was opposed by the Governor on account of the unhealthy climate of the latter place, and the delay it would cause in the receipt of letters at Colombo, which would require to be carried across the island.[1]

Point Pedro, the harbour of Jaffna, is an open roadstead with tolerable shelter behind the coral reefs; but this coast is very dangerous during the north-east monsoon, when it blows heavily on the land, and many native vessels are wrecked here.

Soundings.—A correct idea of the geological position and structure of an island can only be obtained by knowing something about the sea and the depth of water round it. The sea generally on the eastern and southern shores is much deeper than on the western coast, and is unfathomable with one hundred to one hundred and fifty fathom lines at Calpentyn, Pantura, Dondra Head, the Basses, and about Trincomalee close to the shore. In the centre of this harbour, no bottom has been found at eighty fathoms, but near shore there are soundings at from seven to forty on a mud bank formed by four small rivers which flow into it. Between Chilaw and Colombo the shore shelves considerably, being shallow water three or four miles out, with rocky ledges, sand, and coral. The sudden and great depth of the sea off Calpentyn is worthy of observation with reference to the supposed former connection between the chain of the Ghauts and the mountains of Ceylon; the depth of the sea in some places about Manaar is also remarkable, where the bottom is both rocky and sandy at from seven to twenty-five fathoms close to this island. North of Point Pedro there are several shoals of mud, sand, shells, and red coral with breaking coral reefs; the water varies from seven fathoms close to the shore to twenty-one fathoms six miles out. A coral reef lines the shore at Tangalle, which is high and steep; the south-east coast to Batticaloa is often sandy with reefs or rocks above water; about Batticaloa the coast is low, with six feet of water on the bar of the lagoon, and soundings at twenty fathoms on an extensive bank within

[1] *Vide* Reports, House of Commons, 1862, vol. xxxvi.

two or three miles of the shore, which deepens to seventy three leagues off.[1]

Coral reefs and atolls.—Those minute polypi who labour so indefatigably in forming coral, and play such an important part in the formation of new islands, have not been idle, as has been seen in Ceylon. In the clear shallow seas about Manaar the coral can be seen with great advantage at the bottom of the water, which is filled with it, presenting a very beautiful appearance; the bright cilia and tentacula of the polypi inhabiting the coral when at work are spread out beyond it, glowing with brilliant crimson and green, but if the coral is touched these are withdrawn and concealed within it. "The stony part of the lamelliform zoophyte may be likened to an internal skeleton, for it is always more or less surrounded when alive by a soft animal substance capable of expanding itself, yet, when alarmed, it has the power of drawing itself almost entirely into the cells and hollows of the hard coral."[2] There are many varieties of polypi, but the true madrepore are only found in tropical seas, where the extent of their labours almost exceeds belief: among them are *Astræa, Porites, Madrepore, Millepore,* &c., who all form differently shaped coral, some resembling branches of trees, others like a sponge, and some like stars. They have been known to raise on the east coast of Madagascar three feet of coral in half a year, and in the Maldives to raise reefs in a very short time. It has been shown that the zoophytes, who are most effective in forming coral reefs, cannot exist at a greater depth of water than about twenty fathoms, or 120 feet, and are most active in shallow water. Those that live in deep water are quite different in their anatomy, and do not make reefs or atolls; they require to be continually immersed in water, and cannot work above the surface of the ocean. Mr. Darwin describes the wonderful manner in which coral reefs resist the fury of the tremendous surf which falls on them, as if it would break them into atoms.[3] Coral, like everything else in nature whose

[1] Horsburgh, pp. 537, 561–564, ed. 1864.
[2] Lyell, Prin. Geol., ii., ch. xlix.
[3] Coral Reefs, 17, 110.

powers of development are extraordinary, has many enemies to keep it in check, shoals of scarus and other fish in the surf outside feed on the living polypi; also holothuriæ of the Trepang family, and radiata, which are found in great quantities about them; while *lithodomi* and other boring testacea perforate it in all directions, which enables the sea at times to triumph over it, and break up large blocks of coral limestone.

The coral formations and reefs of Ceylon belong to what are called "rising" or stationary reefs, in contradistinction to atolls or "sinking reefs," to which the Maldives and Laccadives belong, and this brings us again to the question of the former greater extent of Ceylon and its connection with the south-eastern continent. According to Mr. Darwin's theory, which is generally accepted as being correct, the singular circular form of the Maldive Islands, in common with most "atolls," is owing to the gradual sinking of the bed on which the madrepore originally raised their coral superstructure; thus the Maldive Islands indicate or mark the peaks of a long chain of mountains which have gradually sunk beneath the ocean. Viewed in this light there must have existed formerly where those islands now are, a large tract of land, the shores of which, from their proximity to Ceylon, would have been very near it if not actually joined. (*Vide* chap. iii.)

A very extensive survey was made some years since (by Captain Moresby) of the Maldives which are a dependency of Ceylon, when it was found there were coral reefs outside the islands extending two or three miles some depth below water, beyond which no soundings could be obtained; the same occurred between most of the atolls, where only a few soundings were found at 150 and 200 fathoms.[1] The largest of the atolls are from forty to ninety miles in their longest diameter, and the whole form a chain 470 geographical miles in length, in 75° east longitude and 1° north latitude. As it is known the zoophytes cannot build up their structures from an unfathomable ocean, the explanation of their being thus

[1] J. Geog. Soc., v. 400.

found in one appears rather puzzling until it is explained by Mr. Darwin's theory of the "sinking of atolls" and the manner of their formation, "it is a general fact long since remarked by Dampier that high land and deep seas go together; steep mountains coming down abruptly to the sea shore are generally continued with the same slope beneath water, but when the reef is distant several miles from a steep coast, a line drawn perpendicularly downwards from its outer edges to the fundamental rock, must descend to a depth exceeding by several thousand feet the limits at which the stone-building corals can exist. That the original rock is as far from the surface is confirmed from the fact that immediately outside the reef soundings are only found at enormous depths, and it is obvious that the presence of the coral alone has given rise to the anomalous existence of shallow water on the reef, and between it and the land."[1]

"The coral-forming polypi begin to build in water at a moderate depth, and while they are yet at work the bottom of the sea subsides gradually, so that the foundation of their edifice is carried downwards at the same time that they are raising the superstructure; if, therefore, the rate of subsidence be not too rapid the growing coral will continue to build up to the surface, the mass always gaining in height above its original base, but remaining in other respects in the same position; not so with the island, each inch lost is irreclaimably gone; as it sinks, the water gains foot by foot, till in many cases the highest peak of the original island disappears—what was before land then becomes a lagoon."

A singularity in the formation of the Maldive atolls consists in their being made up not of one continuous circular reef, but of a ring of small coral islets sometimes more than one hundred in number, each of which is a ring-shaped strip of coral surrounding a lagoon of salt water, nearly every ring having an opening in it, and the same occurs in the principal atolls, which enables vessels to sail into them. The lagoons vary from fifteen to forty-nine fathoms in depth, and their bottoms are covered

[1] Lyell on Coral Reefs, ii. 602, quoting Mr. Darwin.

with sediment resembling mud; the openings in them are attributed to the passage outward of this sediment during a reflux of the sea; from the same cause fringing reefs, which are formed along the shores of an island like those of Ceylon, are usually never nearer than a mile of the shore, and are always breached where streams enter the sea, as the polypi can only live in a pure sea, and grow most vigorously on the outer edges of reefs and atolls, as they love the surf.

Many of the minor atolls are three, and some five miles in diameter, and a few are situated in the midst of the principal lagoon. The larger atolls of the Maldives appear to have been broken up into smaller ones by currents sweeping across them and making a passage. The channel dividing the Madow atoll is attributed to this cause.

Mr. Darwin considers it not improbable that the first formation of the Maldive Archipelago was due to a barrier reef of nearly the same dimensions as the long narrow island of New Caledonia.

The greater part of the inhabited atolls is formed of breccia; they are all higher on the windward side, where the broadest and most habitable portion lies, the entrance to the lagoon being on the leeward side; so slight is their elevation above the sea that the highest land in the Maldives is only twenty feet above it, and many are only six feet.

The aspect of these annular reefs is very striking and beautiful: a strip of land a few hundred yards wide is covered by lofty coco-nut trees, bounded by a beach of glittering sand, again encircled by a ring of foaming surf, beyond which is the deep blue heaving ocean. Within the isle is a lagoon of vivid green-coloured calm water, in striking contrast to the turbulent sea outside. There are many fringing reefs round Ceylon, chiefly on the south-western and southern shores at Galle and Tangalle, also at Venloos Bay, Trincomalee, Point Pedro, Aripo, and Negumbo; they are breached in many places and afford safe anchorage for small trading craft.

There are one or two things difficult of acceptance in Mr.

Darwin's theory. If the Maldives are gradually sinking, how is it that the inhabited parts have not sunk below the ocean before this? The zoophytes have not been elevating these portions as they subside, for they only work under water. The Maldives have been inhabited for more than a thousand years, and the oldest accounts represent them as presenting the same appearance as at present. Are we to suppose that the growth of calcareous formations round their shores, and the accumulation of various matters arising from human habitation, has kept pace with the subsidence? He remarks of the Keeling atoll in the South Indian Ocean "that the surf had commenced an attack on it; coco-nut trees falling with the roots undermined from a rather sudden subsidence, the result of an earthquake," and points out how a severe struggle exists in low coral formations between the nicely-balanced powers of land and water. "The inhabitants of the Maldive Archipelago, as long ago as 1605, declared that the high tides and violent currents were always diminishing the number of the islands, and the work of destruction is still in progress; but, on the other hand, the first formation of some islets is known to the present inhabitants. In such cases it is exceedingly difficult to detect a gradual subsidence of the foundation on which these mutable structures rest" (pp. 18–97).

Again the oval or circular form of the large atolls may be explained by the supposition that they have been formed round an island or a mountain, but this will not explain the peculiar ring-shaped smaller atolls. Evidently there must be some natural tendency in the zoophyte to a circular formation in their constructions quite independent of any line imposed on them in their foundations; the circular formation shows itself in so many ways in which nothing but this peculiar instinct could influence them.

The periods of time with which geologists deal are so immense—a hundred or even a thousand years are nothing in their calculations—a rise or fall of two feet each hundred years would effect important changes after a lapse of centuries, although not perceptible in the limited span of a man's lifetime. Sir C. Lyell calculates that the Scandinavian peninsula

is rising at the rate of two or three feet in a hundred years,[1] and if the Maldives have been sinking at a corresponding rate it is possible the accumulation of matter arising from habitation and other causes would keep pace with it.

[1] Prin. Geo., i. 572.

CHAPTER V.

PHYSICAL GEOGRAPHY.

Minerals.—Dr. Gygax, who was commissioned in 1847, during the administration of Viscount Torrington, to survey the mountain districts about Adam's Peak, and whose investigations extended from Ratnapoora in a south-eastward direction to the mountains near Bintenne, has furnished a list of thirty-seven species of minerals, most of which were known to exist before. He has established the existence of tin in the alluvium along the base of the mountains to the east of Edelgashena, but so circumstanced, owing to the flow of the Wallaway river, that without lowering its level the metal could not be extracted with advantage. The position in which it occurs is similar to that in which tin ore presents itself in Saxony, and along with it the natives find garnets, corundum, topazes, zircon, and tourmaline.[1] Gadolinite, iron glance, chirchtonite, ilmenite, pyrochter, binnerite, pitaniferous iron, and wolfram, a dark grey crystalline substance, an oxide of tungsten, which is found along with tin ores in Cornwall, are given by Dr. Gygax in the Ceylon J. R. A. S. 1847, along with some others, doubtlessly from specimens obtained from natives, who often impose foreign minerals and gems on buyers.

Dr. Gygax's List :—

Rock crystal, a colourless quartz or pure silica ; abundant.

Iron quartz, quartz stained with oxide of iron ; Saffragam.

Common quartz ; a mineral ingredient of primitive rocks.

Amethyst, purple quartz ; Galle Back, Caltura.

Garnet ; a red silicate of alumina.

Cinnamon stone, a variety of above ; Belligam.

Harmatome, a transparent white silicate of alumina ; near Colombo.

Hornblende, or jade, a dark green silicate of alumina and magnesia with iron, a semi-transparent crystal.

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[1] Tennent, i. 29 ; also J. Cey. R. A. S., 1847.

Hypersthene ; a variety of above.
Common corundum, a kind of sapphire ; Badulla.
Ruby, or spinel ; Saffragam.
Chrysoberyl ; aqua marina.
Pleonaste ; a kind of spinel at Badulla.
Zircon ; Ceylon diamond.
Mica, a transparent mineral ; an essential ingredient of granite.
Adularia ; a variety of felspar.
Common felspar ; abundant.
Green felspar ; at Kandy.
Albite ; a variety of above.
Chlorite ; a kind of green mica.
Pinite, a silicate of alumina, with a glossy appearance ; Kandy.
Black tourmaline ; Newera Ellia.
Calcspar, native carbonate of lime or anhydrous gypsum allied to dolomite.
Bitterspar ; true dolomite or carbonate of magnesia.
Apatite ; fluorspar or phosphate of chalk.
Fluorspar ; a variety of above.
Chiastolite, a silicate of alumina, a variety of Andalusite ; Lavenia.
Iron pyrites ; sulphate of iron.
Magnetic iron pyrites ; red oxide of iron contains hematite, often found in connection with gold and gems.
Brown iron ore ; carbonate of iron.
Spathose iron ore, variety of above ; Galle Back.
Manganese ; a greyish white metal, plays an important part in the formation of iron.
Molybdena glance ; sulphuret of molybdena.
Arseniate of nickel ; Saffragam.
Tin ore ; Saffragam.
Plumbago ; pure carbon.
Epistilbite, a silicate of alumina, contains also iron and lime ; St. Lucia near Colombo.

A great many of the minerals in this list, along with some not named, were described by Dr. Davy, the tin ore being the principal exception. Thunberg, in 1777, also described many, and was the first to mention the plumbago. In another part of this work (ch. x. 220), referring to the Kalah of the Arabians, it is stated that tin was not found in Ceylon. It was not, however, known to them.

Iron.—Plumbago and manganese are the only ores of any consequence which have yet been discovered. Iron is very common, and found all over the island, under the form of magnetic iron ore, bog iron, red hematite or bustanite, iron pyrites, specular iron, titanite, earthy blue phosphate of iron, and a brown iron ore or carbonate. Pyrites is rare, and none of those mentioned yield a large percentage of metal, except the carbonate. Dr. Davy was of opinion no regular bed or vein of iron ore was to be found, but the carbonate is now obtained in large quantities. It contains a little chrome and molybdena, and bears a resemblance to spathose and the clay ironstone found in connection with coal formations in Europe. Dr. Gygax says it is of singularly fine quality, and easily

smelted, yielding from thirty to seventy-five per cent. of iron so pure as to resemble silver, and when converted into steel cuts like a diamond.

The natives, from the most remote periods, have been in the habit of smelting the ore in small quantities, in the manner described in ch. xxii., and the good qualities of their steel and iron were known to and appreciated by the Arabians as early as the tenth century. In the "Journal Asiatique" for January, 1854, there is a translation of an Arabic MS. in the library at Leyden,[1] giving an account of the manufacture of Damascus blades, some of which were made of Ceylon steel; and Edrisi says the iron of Sind and Ceylon was employed by the Arabs of Yemen in forging their blades. The only ore of manganese found is a grey or black oxide.

Coal.—Dr. Gardner remarked that it has been often asked what chance there is of coal being found in Ceylon. There is only one circumstance which renders it probable that it may be found, arguing from the analogy of India, where, unlike the carboniferous beds of England, which have in general several systems of stratified rocks between them and the gneiss, those of northern India rest on the gneiss itself. This much is certain, where gneiss forms the uppermost rock, coal need never be looked for.

Anthracite, or "mineral coal, has been found by Dr. Gygax in some places, chiefly in the southern hills at Nambleпane. He calculates that the brown iron ore might be smelted with it for £6 per ton,"[2] but would not charcoal or wood from the abundant forests be as cheap, and yield a better iron?

Plumbago.—In the same neighbourhood there are very rich veins of graphite or pure carbon, erroneously called blacklead, there being no lead in it. This is an important export, sometimes reaching 7,000 tons in a year.

[1] Les lames du moyen âge se subdivisent en étrangères et celles du pays, c'est-à-dire en Arabes ou Persans; les premieres sont celles qui se forgent au Yemen de l'acier de Serendib."—J. Asiat. 1854, p. 70; "Les fers du Sind, du Serendib, et de l'Yemen, . . . rien de plus tranchant que le fer de l'Inde."—Edrisi, Géo., i. 66, tradu. Jaubert.

[2] Tennent, i.

Molybdena, or sulphate of molybdenum, which greatly resembles graphite, but more lustrous, is also found in profusion near Namblepane. The metal molybdenum is very rare, and not often found pure.[1]

Mica is found in large plates, and used by the natives for ornamenting talipat leaves, etc.

Chlorite is a greenish foliated variety, found near Badulla.

Hornblende.—Besides the two varieties mentioned by Dr. Gygax, tremolite and pitchstone also exist. Jade was used for making statues of Buddha.

The Magnesian Minerals are a rose-coloured native carbonate of magnesia, and talc, which is very rare.[2]

Kaolin, or china clay, is found at Newera Ellia and other places in great quantities, but only used in Ceylon for white-washing. Kaolin is decomposed felspar. In regions where the gneiss and granite rocks have decomposed on a large scale as in Ceylon, the resulting clay forms great beds, and occasionally only thin scales, accompanied by corundum. Some specimens are stained reddish from iron, and it is often found in other countries in connection with iron ore and coal.[3] The name is derived from the Chinese "*Kauling*," a high mountain. Sir E. Tennent quotes a Chinese work, which states Pottery-stone, "*Peh-tun-toz*," was imported from Ceylon into China in the fourteenth century.

Quartz, or pure silica, is abundant, and presents many varieties, which when coloured pass for gems. The commoner kinds are a pure quartz sand, as white as snow, which covers the cinnamon gardens to the depth of a few inches; rock crystal, used by the natives for making lenses and small figures of Buddha; iron flint or horn-stone; chalcedony, formerly used by the natives as a substitute for flint in fire-arms;[4] hyalite, a species of opal, resembling whitish glass; and prase, Pliny's "prasius," of a green colour, the name being derived from a

[1] Dana.

[2] Davy. In 1858, 19,423 cwt. of plumbago, valued at 3,889*l*., and in 1869, 140,096 cwt. were exported. Reports of Gov. 1870, xlviii.

[3] Dana, p. 475.

[4] Davy.

leek.[1] The most beautiful of all the quartz is a rose-coloured variety, found in large pieces at Ratnapoora.

Wollastonite, or silicate of lime, predominates in some of the dolomite.

Nickel and *Cobalt* are found in Saffragam.

Sir E. Tennent adds the following rather rare minerals :—

Rutile.—An oxide of titanium, a reddish brown substance, which occurs in granite, gneiss, mica slate, and syenite, also in dolomite. The "veneris crinis" of Pliny (xxxvii. 69), yields, in the hands of the chemist, many fine colours used for colouring porcelain.

Tellurium.—A white brittle metal, very rare in its native state, being hitherto only found in Maria Loretto, Transylvania, although the tellurides are not uncommon, and often associated with gold.

It has been stated that gold is found in minute quantities at Badulla, and in the sands of the Maha oya, at Gettyhida, also that "mercury[2] was obtained by lavage from *débris* of trap rocks" at Trincomalee. Dr. Davy, alluding to this statement, says he never had been able to discover any trace of mercury in the island, and thought it also very doubtful if gold existed either; the natives were so fond of picking up any shining substance, they would have produced them long ago if they were to be found. As nothing more has been heard since about this mercury at Trincomalee it was probably a mistake. The "Mahawanso" speaks of gold in the island, but this authority is not much to be relied on. However it is possible it may yet be found, as some of the minerals recently discovered are associated with gold in other countries.

Salts.—Nitre, nitrate of lime, sulphate of magnesia or Epsom salts, and very small quantities of alum, were the only salts discovered by Dr. Davy, and none have been added since.

[1] Dana, p. 28, 428.

[2] *Vide* Percival's "Ceylon," p. 539; the "Asiatic Register" for 1799 contains a letter from Colombo referring to this discovery; and M. Joinville in a MS. memoir on Ceylon in the library of the East India House, says it was found in "un sable noir composé de détriments de trappe et de cristaux de fer." Quoted by Sir E. Tennent.

Nitre is found in great quantities in the dolomite caves at Wallaway and elsewhere, gloomy humid places, infested with bats, where it trickles through the damp stone and forms semi-crystals. The natives have long been in the habit of making saltpetre from the nitre, for gunpowder, which art they learnt from the Portuguese, but the sulphur is imported from India. Dr. Davy discovered some traces of sulphur in a mineral brought to him by a native, who said he found it near Adam's Peak, which he doubted.

Gems are found in the south-western plains between Adam's Peak and the sea at Newera Ellia, in Oovah, at Kandy and Matele, in the central provinces, at Ruanwella, near Colombo, at Matura, and in the beds of the rivers towards Mahagam; but the chief locality is the Saffragam district round Adam's Peak, where from their profusion the capital has been called Ratnapoora, a Sanskrit word, meaning literally the city of gems; in this neighbourhood they are found in the plains, formed from the detritus of the hills carried down to the lower districts. The richest of these gem-yielding deposits are the valleys round Ballangodde, near Ratnapoora, in the bed and on the banks of the Kalu ganga, and several of the rivers flowing south from Adam's Peak.

The ideas of the Arabians about the island of gems were evidently more derived from the enormous quantities of various coloured quartz, ruby, and garnet sands, of which many rivers are full, than from the actual value of the larger and finer gems, which are generally of inferior quality compared to those of other countries. Chinese travellers write in much the same strain, and say the gems found around the Peak were formed from the tears of Adam.[1]

A large proportion of the sands of the Manick ganga, near Mahagam, are formed of minute rubies, sapphires and garnets, so small as to be valueless.[2] The same may be said of the river which flows through the valley of Newera Ellia, where it passes down the deep ravine at the entrance of the valley from the Kandy side, where hours may be spent in vain looking for one worth carrying away, yet while they glitter beneath the limpid

[1] Marignolli, "Cathay," p. 360. [2] Baker, "Rifle and Hound in Ceylon."

water the effect is such the Arabians may well have called it "the island of gems." The garnet sands from the rivers are used for polishing gems and sawing elephants' teeth into plates.

There are two or three ways of searching for gems, either by digging pits in the soil or examining the beds of rivers when they are shallow in the dry season. About Ratnapoora the natives may be seen up to their middle shovelling up the gravel into baskets, working against the stream. After the mud has been well washed out of the gravel it is carefully looked over for any gems that may be in it. Where pits are sunk some require to be carried down thirty feet before the substratum is reached where the gems lie, which requires a considerable outlay of labour, but is more likely to yield a profitable return than the less laborious river process.

On the banks of the Kalu ganga the upper strata of a gem-pit are formed of a rich and fertile yellow alluvial loam, then a slimy black clay and sand, next a bituminous clay holding numerous organic remains, such as leaves, bits of wood converted into a species of lignite, tusks of elephants, and bones of animals, then sand, and lastly rolled gravel, forming a species of conglomerate, being what is called stone gravel. In this layer the gems are found, most commonly between large masses of agglutinated matter that are always found to abound in gems, especially when they rest upon what is called "malave" by the natives, which appears to be a sort of greenish talc-like half decomposed mica.

Gems are found by the natives in many places unknown to Europeans, or even each other, as they are anxious to keep the secret to themselves; the pursuit has a good deal of attraction for those engaged in it, in consequence of its speculative nature, now and then one of them being lucky enough to find a prize, but as a general rule it is a very poor business, the finders getting a very small sum from the Moors for their gems in the rough state.

Dr. Gygax is of opinion that the larger and finer gems should be sought for in the rocks themselves, among the *débris* of which, carried down to the plains below, the natives

usually seek for them. He found on the south-east side of Pettigalle kanda a stratum of grey granite containing, along with iron pyrites and molybdena, innumerable rubies of a fine rose colour, some quarter of an inch in diameter, but all split and falling to pieces, not an isolated vein but a regular stratum, extending probably to the same depth as the other granite formations, but everywhere in the lower part of the valley it was so decomposed that the hammer sunk in the rocks. On higher ground the rubies changed into brown corundum, and upon the hills themselves the trace was lost, amid a wild chaos of blocks of granite. He believes that in such strata the rubies of Ceylon are originally found, and that those in the white and blue clay of Ratnapoora are only a secondary deposit, and it is highly probable that the finest rubies would be obtained by opening a mine in the rock itself, like the ruby mine at Badakshan, in Bactria, described by Sir A. Burnes, and places were, no doubt, known to the natives where such mines might be opened with confidence of success." [1]

Some of the dolomite of Ceylon contains a quantity of wollastonite mixed with microscopic gems, chiefly purple spinel, moonstone, and green chrysolite. Professor King, Queen's College, Ireland, who has examined some of this dolomite sent home, which is similar to that of Aker in Sweden, is of opinion it forms the matrix of some of the most valuable of the gems that are found in the alluvium of Ceylon.[2]

Kazwini and Ahmed Taifashi, in a work on precious stones, relates that in the valley of the Moon, among the mountains of Serendib, the jacinths were guarded by serpents, and the only way of obtaining them was by throwing down from the tops of the mountains into the deep valleys where they were found pieces of meat which stuck to the gems lying at the bottom, and the eagles hovering about pounced down on the meat and flew off with it to their nests, where the gems were afterwards found. According to Kazwini, when Alexander visited Serendib he obtained some jacinths in this way. This

[1] Quoted by Sir E. Tennent.

[2] Geol. Mag. 1873, p. 23.

strange story, which is similar to Herodotus's account of the way that cinnamon was obtained by the Arabians, is related by Marco Polo of diamonds in the valley of Muftele in India. It is also found in Sindbad, and is related by Di Conti, but the first mention of it is in the work of Epiphanius, archbishop of Salamis, in Cyprus (403 A.D), entitled "De duodecim gemmis Romæ, 1743," which is a description of the twelve gems in the breast-plate of the Jewish high-priest. He represents the jacinths of Scythia as being found in the manner described.[1]

The Manicheans believed in a valley of the Moon, where happy souls were supposed to rest on their way to Heaven. The idea is also found in Plutarch, but neither had any reference to Ceylon.[2]

Formerly the kings of Kandy claimed a monopoly of the gem regions, and persons were obliged to pay a royalty for permission to search for them, which is mentioned by nearly all the travellers in the island. Some years after the British obtained possession the monopoly was abolished, and gem-hunters can now search where they please.[3]

Few things are more extraordinary than what the chemists tell us about precious stones—that the most costly and lovely gems are only oxides or silicates of some valueless substance; but, however, although they can pull nature to pieces they cannot build her up again; we can take away life, but we cannot restore it; we can reduce a costly and brilliant gem to a worthless powder, but we cannot turn the powder into the gem; here nature has hitherto defied the cleverest savant, and will continue to do so until the end of time.

Of the ruby family there are three varieties—spinel, sapphire, and corundum. The spinel, or ruby of Ceylon, is the best after that of Siam, which are the finest in the world; they are found as rolled pebbles in the rivers, or in dolomite and clay ironstone *débris*, the deeper and clearer the red

[1] Col. Yule's Polo, p. 298. Major's Di Conti, p. xlii. J. A. S. Beng. 1832, p. 354.

[2] Dupuis, vol. x.

[3] Asiatic Jour. 1827, p. 249.

colour the more valuable. Barboso and Cæsar Frederick both state Ceylon rubies were inferior to those of Ava in colour, but that the Moors had a way of correcting them by fire; but they must have some secret or special skill in the matter, as the experiment has been tried in Germany without success.[1] This business is still in the hands of the Moors, who hawk jewellery about Colombo and other towns; a stranger requires to be on his guard in dealing with them.

By far the best of the Ceylon gems is the sapphire, of which some very large and valuable specimens have been found. Barboso mentions that they were considered the finest in the world. They are generally of a dark blue, but they are sometimes found as pale as water. The real or oriental topaz is a yellow variety of the sapphire.

A kind of spinel, called Ceylonite or pleonaste, of a fine greenish colour, the oriental emerald of the jewellers, is found in the river Mahavilla ganga, near Kandy. A purple variety is sometimes called the oriental or true amethyst. There are also black, white, and many varieties of dark blue pleonaste.

Chrysoberyl is a beautiful gem of a yellow-green colour, allied to the sapphire, but, like the Ceylonite, is not a true sapphire; it is also called *aqua marina*.

When the sapphire occurs in dull, dingy crystals it is called corundum, and employed in cutting and polishing stones. Corundum is also called adamantine spar and emery.

A variety of ruby, having a stellate opalescence when viewed in a particular light, is the asterated sapphire or "Asteria" of Pliny (xxxvii. 47). They are common in Ceylon and of little value. A variety of quartz, called "Asteria quartz," has also got a star or whitish radiations in it.[2]

[1] Note by Hon. H. Stanley to his Barboso, p. 218. The Florence Map (A.D. 1417), has "Xilana Taprobana insula . . . rubinis, sapphiris, granatis et oculis gatta, cinamomum, etc."

[2] Dana, p. 138. Sir E. Tennent mentions that the cook of a government officer found a ruby the size of a pea in the crop of a fowl. Garnets are arranged by mineralogists into three chief divisions, alumina garnet, iron garnet, and chrome garnet; the carbuncle or pyrope is a sub-variety, magnesia-alumina garnet, the cinnamon stone is a lime-alumina garnet. Common garnets from an excess of iron often become rusty and disintegrate.—Dana, p. 270.

There are three specimens of garnets in Ceylon; the common garnet, cinnamon stone or "essonite," and the precious garnet. Although cinnamon stone is abundant, it is confined to one district about Matura and Belligam, where there is a large rock chiefly composed of minute stones mixed with felspar, quartz, hornblende, and graphite; it appears to have fallen or become detached from a vein in the gneiss rock above.

Cinnamon stone is seldom found large without a flaw, and is of a deep orange colour, resembling oil of cinnamon; a yellow variety is often called hyacinth.

Precious garnet or carbuncle when large is a valuable gem, having a clear fire-like colour or reflection; the ancient name "perope" means a fire or burning coal, and Pliny's (xxxvii. 40) "carbucolus" is from the same source; the yellow variety has been called the hyacinth. So many gems have been called hyacinth by the ancients, it is difficult to define which was the real one. The celebrated gem belonging formerly to the kings of Kandy, mentioned by so many travellers, from the description of its "flame-like appearance," was more probably a carbuncle than a ruby, or it may have been a zircon, some specimens presenting a similar glow. (*Vide* ch. xii.)

Quartz having a clear purple or violet colour is called amethyst; the hue is owing to manganese or iron; when large and of a deep tint, amethysts are handsome and valuable stones, although not real gems; the deeper the colour the better—they are well described by Pliny. Yellow quartz is called false topaz, and often sold for the real, which is a very beautiful stone of a clear gold colour, and should be free from any tinge of red.

Cat's-eyes are considered by the natives one of the most valuable of their gems, and are supposed to be the finest in the world; Dr. Davy says they are the only ones worth having; but latterly, some specimens nearly equal are found in Southern India: "they are a species of greenish quartz, exhibiting opalescence, but without prismatic colours, especially when cut *en cabochon*, an effect due to fibres of asbestos, which gives a moving ray."[1] The sharper the edge of the ray the more valu-

[1] Dana, pp. 190, 274, 369.

able ; those the size of a hazel nut are worth from 100*l.* to 300*l.* At the sale of the King of Kandy's jewels in 1820, there was a cat's-eye which measured two inches in diameter, and brought 400*l.*

Moonstones are very common; a species of albite or adularia, otherwise felspar, with a slight irradiation and of a pearly grey colour. Dioscorides speaks of a moonstone, so named, because it was found at night, which was probably crystallised gypsum, the modern selenite.

Tourmaline is a sub-silicate, found in crystals among granite rocks, or near dykes of trap; they are generally of small size and various colours—green, yellow, white, amber, and red, which are the best; these look dark and opaque when placed on a table, but if held against the light the red colour shows itself. The name is derived from the Sinhalese "turamili," and were called by the Dutch, who first introduced them to Europe, "Ash drawers," as they possess electrical properties, and were long known as schorl.

Zircon is a silicate of zirconia, very abundant in the neighbourhood of Matura, hence called Matura diamond, and is also found in the Ural gold region. Zircon is very lustrous, and bears a great resemblance to diamond when cut, and is next in hardness to the sapphire; specimens are of various colours—orange, red, green, and white, which are often sold for topazes, rubies, and other gems, and are much used in watch-making. Zircons were formerly highly esteemed in Europe, and is the stone Arabian writers allude to when they say diamonds are found in Ceylon; although D'Herbelot thought they meant corundum or adamantine spar.[1] Barboso, who calls them jagonzas, says they make in India false diamonds of white rubies and sapphires found in Ceylon.

Sir E. Tennent estimates the annual value of the precious stones exported from Ceylon at 10,000*l.*

As in the case of pearls, the finer gems are not easily obtained in the island, being reserved for the native princes of India. In the returns presented to the House of Commons for

[1] Biblio. Orientale, p. 788; Stanley's Barboso, Sommario dell' Inde, p. 213. *Vide* ch. xii.

1858, the pearls and gems entered at the Custom-house, Ceylon, for exportation, are valued at only 7,918*l.* Many gems are offered for sale in Ceylon by the Moors which do not belong to the island, such as agates, opal, turquoise, &c.

Soil and Agriculture.—Notwithstanding the prolific display of vegetation in most parts of the island, the soil is generally poor and unsuited to the production of grain crops and some other plants used by man. In many places quartz and felspar sand is the principal ingredient in the soils, and they appear to be wanting in the phosphates of lime so necessary to all cereal grasses. Even the forest land is often deficient in the quantity of mould or "humus" resulting from decaying vegetation, which one would expect to find in a primeval forest containing such large trees; and a good deal of disappointment has been experienced by coffee planters and others in this respect, it having been found on cleared forest land, the only sort where the cultivation of the coffee plant is practicable, that plants would only yield a good crop for three or four years without the addition of manure, when this stimulant became necessary to maintain them in their productive powers, while in the southern and lower districts they were quite a failure; some of this is no doubt traceable to the exhaustive nature of the plant. Liebig has pointed out that it is probable one of the causes which led to the destruction of the great cities of antiquity was the difficulty of supplying the inhabitants with food; as they went on increasing, the soils in their neighbourhood became exhausted of the phosphate, and at last refused to grow food; and to this cause perhaps, more than the destruction of the tanks, may be traced the decay of the cities of northern Ceylon, although rice may be less dependent on this element in the soil than other grains, the water with which it is covered during a great part of its growth probably containing in solution the necessary elements for its development.[1]

In Arabia the soil in which the coffee plant flourishes best is a kind of claystone slightly phosphoretic, irregularly disposed among trap rocks; and in India the plant requires a rich soil

[1] There is an article on coffee soils in Simmonds' Colo. Mag. vol. xv.

and regular manuring. Sugar-cane also, which it was supposed would flourish in this tropical island, has proved a failure[1] in most parts, except Peradenia, the juice containing too large a proportion of water, and this is likewise a plant which requires a large quantity of the phosphates.

Jaffna is considered the most fertile part of the island for regular agriculture, where it is industriously pursued by the Tamils.

It is a remarkable proof of the accuracy of Dr. Davy's investigations that he should have anticipated what experience has taught the planters of Ceylon, that the soil is deficient in vegetable matter, which he attributed to the high temperature and heavy rains not allowing it to accumulate; in the higher regions, where the temperature is lower, the amount of mould is larger than in the coast districts. Sir S. Baker takes rather a disparaging view of the capabilities of the island, saying, "Few countries have so much bad soil; there are no minerals but iron, no limestone but dolomite, no other rocks than quartz, and the natural pasturages poor; sugar estates do not answer, and coffee plantations are expensive."[2]

Ceylon possesses one great advantage in an abundant supply of spring and river water, which the ancient inhabitants turned to account in their numerous tanks and water courses for irrigating their rice lands, many of which are still used. Agriculture has always been the chief employment of the Sinhalese.

As wheat will not grow well in Ceylon they are dependent on rice, or inferior grains, and as rice cannot be grown without an abundant supply of water, the whole energies of the kings of the Wijayo dynasty were devoted to forming tanks and reservoirs for this purpose, the greater part of which have fallen into ruin, and in many places have become a fruitful source of jungle fever.

Their number and gigantic proportions excite the utmost

[1] In an article on the productions of Ceylon by Capper, J. R. A. S. 1854, xvi. p. 272, it is stated the largest quantity of sugar exported amounted to only 10,000 cwt.

[2] "Rifle and Hound."

wonder, especially when we consider that they have been made for the most part, according to all appearances, by the sheer toil and perseverance of thousands of hands with wretched tools and appliances, and in some instances with little skill or ingenuity. They are all described in Turnour's "Epitome."

The largest is the great tank of Kalawera, N.W. of Dambool, made in 460 A.D., which is supposed to have been when perfect forty miles in circumference, with a stone embankment twelve miles long. One of the most remarkable is the tank or lake of Minery, constructed by Maha-sen at the end of the third century, and formed by damming up the Kara ganga. It is about twenty miles in circumference, and situated in a low marshy country. The embankment, which was made of stones, is one and a quarter miles long and sixty feet wide, but now in ruins and overgrown with a low jungle; a small stream a few feet deep runs from it, and after swamping the surrounding country flows into the Mahavilla ganga.

The first tank made in Ceylon was constructed in the reign of King Pandukabya (437 B.C.). There is reason to suppose the art was practised in India some centuries before. The number of tanks of various dimensions in the island at one time must have been very great; two kings are represented as having made sixteen each. According to the 'Kashmir Chronicle,' the Siṉhalese engineers had acquired some sort of celebrity in the formation of works of this kind, as it says: "the Raja of Kashmir in the eighth century sent to Ceylon for engineers to construct some for him."[1]

The tanks of Ceylon are supposed to exceed in extent and grandeur those of all other countries, neither the lake of Mœris in Egypt, made according to Herodotus[2] to prevent the too great inundation of the Nile by receiving the surplus water subsequently let out as required, nor the great tank of the Emperor of Delhi near Ajmeer, being equal to them.

One of the grandest works of the kind in the world, if we

[1] Raja Tarangini, p. 505.

[2] The lake of Mœris is now stated not to be artificial, but a natural hollow; Limat De Bellefonds.

are to believe the account given of it in Sale's 'Koran,' was the vast reservoir with an embankment 120 feet high, made near Saba, by Abd-Sherris, which broke from the weight of water, devastating a great extent of country and sweeping away eight tribes of Arabians.

Another grand work is that described by Rashiduddin in China, a great canal and road forty days' journey in length, made by Kubali in the thirteenth century, constructed of large blocks of grey marble twelve feet thick and held together by iron clamps.

Even when all the tanks were in a perfect state it is not improbable that rice was imported. It is mentioned as an import previous to Wijayo's landing, and again in the third century B.C.,[1] when Asoka sent a present of 160 loads of hill paddy, and Ibn Khordadbeh[2] mentions it in his list of imports, also Edrisi; but since their destruction by the Malabars and neglect, Ceylon has been almost dependent on India for her staple article of food as well as the wheat consumed by the Europeans.

Of late years large sums have been expended by the Government in repairing some of the tanks; and in 1867 the ancient minute regulations of the kings for protecting the water-courses, embankments, preserving the water, settling disputes, &c., have been re-enacted and enforced, which it is expected will greatly reduce the importation of rice.[3]

Little progress has been made in agriculture: rice is sown with the same kind of implements and in the same manner as it was 2000 years since. Milk and butter are mentioned from the earliest dates as farm produce; clarified butter, or "ghee," both from buffaloes and cows, is named in the Mahawanso (320 B.C.); "ghee" is made by first boiling the milk, the cream being removed next morning, and churned in an earthen vessel with a cross stick, the butter is then melted in a pan to get the water out.

There are many varieties of rice (*Oryza sativa*) grown in the island, that which is the longest ripening yields the most

[1] Mahow, pp. 49, 70, 176. [2] *Vide* ch. xi.
[3] "Ceylon Gazette," £13,727 in 1869; Reports 1873, xlviii. 23.

return; before sowing they calculate the supply of water they are likely to have from the tanks and sow accordingly, for if the water fails before the rice is ripe the crop is lost.

Rice is grown in two sorts of places—in low swampy districts which can be irrigated from tanks, a mound of earth being raised all round the fields to retain the water when it is turned on; a constant source of dispute among the cultivators, some claiming more than their share, and as Kandyans are exceedingly fond of litigation they never fail to avail themselves of an occasion for indulging in it—the banks that hold the water are used as paths for passing from one field to another.

Whenever a stream of water can be conveyed to irrigate them rice is also grown in terraces made on the sides of hills, where they form an angular recess; the earth is thrown into a mound in front of each terrace to retain the water which runs over the top terrace to the one below, and so on to the bottom. Similar terraces, the work of the Moors, are to be seen in Andalusia in Spain.

The village communal system established many centuries ago round the tanks has flourished more or less ever since, resembling in some respects that of India, which has existed from time immemorial (*vide* ch. vii.). In 1843, the old Patriarchal Courts existing in each commune for settling disputes among the cultivators and regulating the water courses, were abolished; but experience has shown that they were better suited to the nature of the people than the "District Courts" on the European model which replaced them, and the old native tribunals were wisely re-established by a decree of Sir H. Robinson, in 1871. The native cultivators were dissatisfied with the "District Courts" and their decrees, complained of the long journeys they were often obliged to take, and the loss of time attending them, the "Courts," from the number of cases to be heard, being usually in arrears.

Tame buffaloes are used for all agricultural purposes, being admirably adapted for working in the soft mud of the rice fields.

There are two crops of rice cut every year, the "Maha," which

is the principal, and the "Yalla." There is no particular seed-time in the island generally, which varies according to position; in the south-west it is regulated principally by the monsoons, sowing soon after the change. Rice-fields in wild districts are usually guarded by a native perched in a kind of sentry-box made of sticks and branches on poles stuck in the mud, and at night torches, called chules, are burnt to keep off elephants; but this is less necessary now than formerly, as these animals are not so numerous.

Rice is very easily threshed, the greater part of the grain falling out when quite dry, and is trampled on by buffaloes on a threshing place.[1]

Several kinds of inferior grains, such as millet (*Panicum miliaceum*), and koorakan (*Eleusine indica*), are extensively cultivated, also many varieties of edible plants, which are all described in chapters on botany. In the peninsula of Jaffna a kind of garden cultivation with fenced enclosures generally prevails, and water raised for irrigation from wells by water-wheels and buckets at the end of horizontal beams, suspended between two upright posts; the bucket when full of water is raised by a man walking along the other end of the beam, which tilts it up, when it is emptied by another into a reservoir.

The cultivation of cotton has much increased of late, and said to equal that of New Orleans; tobacco is also grown in large quantities at Jaffna for export to India.

The live stock in the island in 1863 was—

Horses	14,637
Cattle	681,647
Goats	48,319
Sheep	82,450

The number of horses is more than double that of a few years previous. In the same year they were valued at from £10 to £50 each; cattle from £2 10*s.* to £7; and sheep from 4*s.* to £2 10*s.*[2]

[1] There is an article on Ceylon agriculture in the Ceylon J. R. A. S., 1848.

[2] Reports for 1866, vol. lxxiii.

In 1864[1] the number of acres under cultivation was stated to be as follows in round numbers :—

	ACRES.
Rice	501,700
Fine grain	86,700
Coffee	162,700
Pepper	360
Mustard	670
Gram	530
Indian corn	30,740
Peas	1,830
Gingely	41,600
Cotton	106,200
Tobacco	8,800
Cocoa nuts	253,000
Gardens	13,600
Pasture	329,000
	1,537,430

In 1858 the number of cocoa-nut trees in the island was estimated at 20,000,000, which must have been above the real amount if this return is correct. At 80 trees per acre, rather thick planting, 253,000 acres would give 20,240,000 trees, and cocoa-nut plantations have largely increased since 1858. A writer in the Journal of the Royal Asiatic Society, for 1869, estimated the number of acres under cultivation in 1866 at 1,397,000. The total number of acres in Ceylon is 15,808,000.

Chenna cultivation.—This is a kind of agriculture, similar to that practised in the backwoods of America, where, when a farm is exhausted of its mineral constituents, a farmer finds it cheaper to migrate to a new farm than to spend money on manure. In Ceylon, a piece of jungle not much encumbered with trees is selected, and fenced round with the underwood which is cleared from the ground, and a hut built, the remainder of the wood being burnt. The place is then sown with Indian corn, vegetables, pumpkins, or fine grains. After two or three years they clear another place. It is necessary to obtain a licence from government to follow this system, which has an attraction for some classes of the population, but is very destructive of a great deal of land. The fine grain usually

[1] Reports for 1866, vol. lxxiii.

grown on chenna was exempt from the tax of one-fourteenth of the produce imposed on rice, which exemption has led to such an increase in this mode of cultivation, of late years reaching 4,000 acres per annum, that it was proposed to check it, by making fine grain pay the same tax as on rice. Some attempts have recently been made to grow wheat in small quantities in the hill districts.

CHAPTER VI.

CLIMATE—DISEASES—METEOROLOGY.

CLIMATE.—Words can give but a faint idea of the brilliancy and voluptuousness of a tropical climate; the deep blue cloudless sky and monotonous splendour of the days; the delicious softness and solemn radiance of the moon-lit nights; the surprising lustre and number of the stars; how unlike northern climes, where the sun so obscurely shines, and gloomy vapours try to drown the struggling orb! Here sunny nature smiles every day, and Pomona holds uninterrupted sway. When the chilly north puts on its winter vest, migratory birds come here to build their nests and rear their young under its genial sun. The western side of the island, which is exposed to the south-west monsoon, has a humid and temperate climate, similar to that of the Malabar coast, the port of India that most resembles Ceylon, while the eastern side, which is open to the north-east monsoon, has a hot and dry climate, similar to the Coromandel coast, the climate of Trincomalee resembling Madras.

Monsoons.[1]—The weather in Ceylon is entirely regulated by the two monsoons, dividing the year into equal portions, with different effects in each. The north-east monsoon blows uninterruptedly from November to March, and although the wind comes from the cold mountain regions of Asia, the days are hotter, but the nights cooler, than with the south-west monsoon, the thermometer rising above 80° by day, and to 70° at night. The wind is comparatively dry and parching, and rain rare. In March the wind becomes variable, and the heat

[1] The word monsoon is of Arabian or Persian origin, *Mausem-e-behur*, literally a change in the weather. Mas'udi speaks of the mausam of India. Reinaud, Voy. Arab.

gradually increases during the whole month, which is one of the hottest of the year.

In April the heat becomes intolerable, the thermometer rising to nearly 90° The sun as it passes over the island is now nearly vertical, and all animated nature anxiously seeks the shade to escape the fervour of its rays. Towards the close of the month signs of a change begin to show themselves; the distant mutterings of thunder are occasionally heard, the sky assumes a troubled appearance in the evenings, and a swell sets in on the ocean, throwing a heavy booming surf on the coast, which seems doubly loud in the still atmosphere. Banks of clouds form on the ocean's horizon, and the nights become nearly as suffocating as the day. In the early part of May things reach their climax; grass and vegetation on open places round the coast entirely disappear, and the bottoms of tanks and pools are as hard as a road. Stray wild animals and crocodiles, with panting sides, approach habitations in search of water, the pangs of thirst overcoming their fear of man. The hoarse croak of the frog is no longer heard; butterflies and smaller insects are rarely seen, and ants die in crossing a few yards of sand; even the nimble lizard moves languidly across the path. A general exhaustion seizes on every living thing. Sinhalese and European animals and insects, all are alike prostrated,[1] and the least exertion becomes distasteful. At last the change so ardently wished for arrives. Vast banks of clouds are seen rising over the ocean, and advancing towards the land, the conflict of the elements begins. The storm generally breaks on the earth in the evening or at night, accompanied by violent gusts of wind. Tremendous peals of thunder roll through the atmosphere, and seem to shake the earth to its foundation. On every side a succession of blue flashes pierce like so many lances of light through the darkness, illuminating the sky, and revealing objects with the brightness of day for an instant, when again all is in gloom. The rain descends in such a continued stream that even the thirsty earth is unable to absorb it fast enough, and flows over

[1] Strabo mentions that the heat in Susa was so great, lizards died from it when crossing the roads.—Page 731.

it in a sheet. The noise of the falling rain is so great, especially on the tile roofs of the houses, that the voice is drowned and sleep impossible. It actually seems as if the ocean was let loose on the earth, and the new arrival, unaccustomed to such a downpour, imagines that another deluge has arrived. In a few hours the air becomes so cooled that people are glad to put on warmer clothing.

Next day presents a gloomy spectacle. The rain still descends in torrents, and hides the distant view; the sky is dark, and everything is saturated with water; the swollen rivers sweep along with resistless violence, carrying on their surface remains of huts, floating implements of husbandry, branches of trees, and carcases of dead animals. For some days after the grand outburst heavy showers occur at intervals. The lightning sometimes causes great damage amongst the cocoa-nut and palm trees, which thus shield the houses, and the flag-staff near the old light-house has been several times struck, but on the whole the destruction caused by lightning is less than would be expected. It often forms holes in the earth, where it explodes like a shell, vitrefying the sand through which it passes.[1]

No one who has not lived in the tropics can form an idea of the violence of the elements at the changes of the monsoons, especially the south-west, the thunder bursts with such sudden and tremendous crashes, it strikes with awe the most insensible and turns the stoutest heart pale. In the thin air of the higher mountain regions the noise of the thunder is even more terrific than on the coast.

When the storm is over nature quickly responds to the all-powerful influence of the rain; the air becomes pure and delicious, and a delightful feeling of invigoration is felt in place of the former languor. The change is quite magical; every plant

[1] The southern coast of Ceylon is remarkable for the electrical state of the atmosphere. Lassen says, "Dondra Head is called 'Thunder-head' by the English sailors, in consequence of the repeated thunder and lightning in the vicinity; this was also observed by the Arabian mariners. Edrisi mentions the lightning that was always playing round Adam's Peak, and a Turkish nautical work of the sixteenth century says the sign of Ceylon is contiuued lightning; it is proverbial for a liar."—J. A. S. Beng. iii. p. 466.

and flower looks freshly awakened; animated nature shakes off its previous lethargy and resumes its wonted activity; the gardens and jungles are again alive with swarms of insects, lizards, sun birds, and clouds of butterflies.

The response of vegetation to the vivifying power of the rain is almost instantaneous. In less than twenty-four hours the green tinge of the young plant appears over the surface of the ground, which becomes covered with a sudden and luxuriant carpet of verdure. During the change of the south-west monsoon, and for some weeks after, the wind blows very strong at times on the south-western coast, with a heavy surf, and communication kept with difficulty between the shore and vessels in the offing, which sometimes drag their anchors and are driven on shore.

A comparative coolness reigns during the south-west monsoon, caused by a refreshing sea-breeze, which blows steadily during the principal part of the time, accompanied by occasional showers, with thunder and lightning, the thermometer ranging from 78° to 82° during the day, and about 70° at night. In October the sun is again vertical as it passes over the island; the sea-breeze gradually declines, the wind veering round to the northward, and heavy showers are frequent. In November the thermometer continues to rise; there is little wind, and the weather becomes sultry and oppressive, but not so unbearably hot as in March and April, neither is vegetation so much burnt up, and the air is moister. The north-east monsoon now sets in with less violence, and less suddenly than the south-west, many thunder-storms heralding the change, which is not so agreeable, neither is there such a downpour of rain. The north-east monsoon is very treacherous, and should be carefully prevented from blowing on a person at night. This account of the monsoons chiefly refers to Colombo and the western coast. On the eastern side of the island the south-west monsoon is not much felt, as, the mountains intercepting the clouds, the western coasts are deluged with rain, while the eastern are suffering from drought. There the north-east monsoon is the principal one.

Rainfall.—Although the occasional showers of England are

little known in India, they are not uncommon on the western coasts of Ceylon, and in the mountain regions of the interior are frequent. Except during the months of March and April, it is rare that a whole month passes at Colombo without a little rain, but the principal part of it falls at the changes of the monsoons, when three inches is the ordinary quantity in a few hours, which is immense, and twenty inches fall before

Rainfall of India.	Inches.	(Sessional Reports, 1864, vol. xliii. 28.)
Bombay	80·	
Mahabuleshwar	302·66	
Cochin	106·	
Mercaria	143·	
Uttray Mullay Ghauts	263·	
Cape Comorin	28·	
Coromandel coast	21·	
Madras	49·	
Calcutta	64·	
Cherra-pongi, a hill station	610·	
Sylhit	209·	
Moulmein	175·	
Delhi	27·	
Mean fall for India.		
Malabar coast	81·7	
Ghauts	175·2	A writer in the "Ceylon Times" says the last thirty years have been comparatively dry, and that they are now entering a wet period of the same duration.—Quoted in "Nature," March 1872.
Coromandel	52·8	
North East Province	242·1	
Central Bengal	36·	
	117·5	

the south-west monsoon is settled. At Trincomalee and the eastern side of the island the rainfall is little more than half that of the western side, while at Jaffna and the northern parts it is still less, the greatest amount of all being at Kandy and the higher mountain districts, with Adam's Peak, which is constantly enveloped in rain-clouds.

There is a great deal of discrepancy in the records which have been kept both of the rainfall and temperature in different parts of Ceylon, but the average fall of the whole island cannot be much under that of the tropics generally, or ninety-five

inches in the year, or more than three times that of England. Some years the rainfall is excessive, and in 1862 it was unprecedented.

According to recent returns the average rainfall of Colombo for ten years ending 1864, was 76·50 inches; that of Kandy, 90·75 inches; Trincomalee, 40 inches; Galle and the south-western coasts same as Colombo, 76·50 inches. The total rainfall of Ceylon is about one-fifth less than that of Hindustan, taken as a whole, though considerably more than the Coromandel coast, Bengal, or Central India, while the quantity of rain which falls during the south-west monsoon is light compared to some parts of the Malabar coast, thirteen inches having been known to fall in the Ghauts in one day! and in the hill station of Cherra-pongi, in the north-east province of Bengal, 610 inches fall in the course of the year.

Temperature.—In consequence of Ceylon being an island of moderate size, within the tropics and surrounded by the Indian Ocean, the temperature is very equal and free from the extreme heat of India, where the thermometer in Bengal during May and June rises to 110°, and in the Carnatic to 100°. In Ceylon, on the western coast, the thermometer rarely varies more than 10° all the year round, or rises to 90°, but at Kandy and the mountain parts the thermometer sometimes varies 30° in a day, while Jaffna, from its proximity to India, is the hottest part of the island.

Travellers arriving in Colombo from India during the hot season are charmed with its comparative coolness, where no danger is to be feared from exposure to the sun at all times, and persons can walk about in the day without the risk of *coup-de-soleil;* neither is it necessary to have mats hung before the doors and windows, kept continually moist from water thrown on them, as is the case in Madras and other parts of India. Except in March and April, the heat is not such as to prevent active exercise being taken without positive discomfort. It is not so much the high temperature which tells on the system as the continuation of it, there not being at any time of the year sufficient cold to brace up the nerves, yet the setting in of the cold season in India is often the most un-

healthy, and the changes in the monsoons require to be guarded against in Ceylon also. During ten years the thermometer ranged in Colombo from 76° to 86°, and the mean average temperature during the year was 80°. At Trincomalee the thermometer ranged during the same period from 74° to 94°, the mean average being 81°·4; at Kandy it ranged during the year from 52°·5 to 89°·5, the mean being 75°·92; and at Galle from 74° to 85°, the mean being 80°.[1]

In Newera Ellia Ceylon possesses a valuable sanitarium within twenty hours' journey of the coast, where a short stay often proves beneficial in bracing up the relaxed system, but it is doubtful if it is more healthy than Colombo as a permanent residence.

Health and diseases.—For a tropical island Ceylon has a comparatively healthy climate, except some of the thinly-inhabited parts and low jungle between the mountains and the sea, which are much subject to malaria. Colombo is decidedly the most healthy town[2] in the island, and has the most equal temperature, the nights being within a few degrees as hot as the day, which many persons consider a drawback, but Kandy and places in the interior where the nights are sufficiently cold to require some warm clothing, are less healthy than the sea-coasts generally. In the interior, specially about Kandy, the air at night is very damp, and at sun-rise heavy mists pour in great volumes down the valleys, giving great beauty to the scenery, but producing extreme chilliness in the air, and are full of miasma.

Malaria.—At Colombo and the western sea-coasts during the south-west monsoon there is always a strong and pleasant sea breeze, which can be freely admitted into bedrooms without danger at night by leaving all window blinds open, but the north-east monsoon blowing over the land and bringing with

[1] The Journal of the Asia. Soc. of Bengal for 1864 contains a number of tables of observations on the weather at Gangaroona near Kandy, from which it appears the mean temperature was 73° a.m., 80° p.m., and 61° at night.

[2] According to Horsburgh, Colombo is the healthiest seaport in India. Sir E. Tennent says erroneously, that "Jaffna is the healthiest part of the island;" nowhere are epidemics so fatal.

it the malaria of the jungle is very dangerous, causing paralysis if allowed to blow on a person while asleep. On the eastern side of the island the monsoons change places in their effects—the south-west bringing the malaria, and the north-east the sea breeze. At Trincomalee the "land wind" is often deadly in its effects. Horsburgh mentions "how noxious it is to Europeans to sleep on shore exposed to it at night. Many seamen of Her Majesty's fleet, under command of Admiral Hughes, by exposure to this wind, were seized with spasms, which generally ended in speedy death." (P. 571).

The natives say malaria is increased by the perfume of some flowering trees such as the "Mee" (*Bassia longifolia*), which is covered with an enormous quantity of whitish flowers that diffuse an oppressive and sickly odour in their vicinity. The Spaniards of Malaga consider it unwholesome to smell the scarlet geranium, and the Italians have the same idea with regard to other flowers. It is not improbable that in tropical countries some flowers do contain a miasmatic principle. The honey of a few is said to be poisonous, and there is the well-known instance mentioned by Xenophon referring to the *Azalea pontica*. Many cases might be mentioned of the injurious effects of the "land wind" even on animals.

There is something very mysterious in the movements of malaria: it will show its poisonous influence on one side of a valley or hill and not on the other, and exhibits its worst features along rivers, being less dangerous near rice fields than a similar swamp left uncultivated. Some localities in the island are noted for malaria, such as Ambepussa and the neighbourhood of the Maha-oya, similar positions being free from it. It sometimes occurs at Colombo, which is some distance from a malarious neighbourhood. Few persons can remain for any time in some of the low jungles without having jungle fever more or less severe, and require to provide themselves with quinine. In 1803, according to the reports of the medical men in "Cordiner's Ceylon," it assumed a resemblance to the yellow fever of the West Indies. (ii. p. 272).

Dysentery—is the great complaint of the Europeans, and is nearly as common among the natives. Pérou, in his "Voyage

aux Terres australes," attributes his exemption from this complaint to his using betel, but, as Dr. Davy remarks, this is imaginary. The tendency to inflammation of the liver, another scourge of the Europeans, is much diminished by active exercise, which important fact was fully proved to Dr. Davy during the Kandyan campaign of 1817, there being fewer cases among the men continually on the march than at any other time.[1]

New arrivals are much tormented by prickly heat (*Lichen tropicus*) and boils. Nearly all assume in a short time a peculiar yellow tinge of skin, while the mind and body diminish in activity, accompanied with increased irritability. The disposition to quarrel and irascibility among the Europeans are well-known to residents. As the strongest digestive powers become impaired from the heat and habitual uses of curries and spices to stimulate the languid appetite, Ceylon is a bad place for persons of dyspeptic tendencies and hepatic congestion; but those of scrofulous, gouty, and rheumatic habits derive benefit from a residence in the island. It is also very injurious to children and young persons.

There is less danger to be apprehended from exposure to the sun than may be imagined, the risk of *coup-de-soleil* being very slight, while active exercise is decidedly beneficial. Colds and chills are as easily caught as in England, and are common among new arrivals, from their practice of sitting in draughts, fancying from the high temperature there can be no danger in doing so. However, there is nothing more dangerous than a chill in a tropical climate, the heated state of the body and open pores of the skin rendering the frame peculiarly liable to them. It was said in the island that the climate of Galle had a tendency to diseases of the brain and madness.

When the British obtained possession of Ceylon the mortality among the troops was excessive, but has steadily declined ever since, and now bears a favourable comparison with other tropical colonies. Previous to 1817 the death rate was 76 per 1000 annually; from 1817 to 1836, among an average strength of 2149 men, the rate was 69 per 1000, or 150 deaths

[1] Davy, p. 489. *Vide* ch. xix.

per annum;[1] and in 1863, 29 per 1000. The medical report for that year[2] states that the principal diseases were miasmatic or fever, dysentery, and ophthalmia, disorders of the digestive and respiratory organs taking the next place. The report for 1864 attributes the mortality to the bad water of the Colombo wells, largely charged with nitrates, the want of drains, and the stagnant canal running near the barracks.[3]

The following account of the military stations in Ceylon is taken from the Royal Commission on the sanitary state of the Indian army :—

"The fort of Colombo is described as being from twelve to eighteen feet above the level of the sea, and occupies sixty-seven acres, being 650 yards by 500 yards within the fortifications. The climate is a trying one, and the elements of local malaria appear to exist to a sufficient degree to account for the prevalence of the periodical fevers which affect the garrison. The average mean monthly temperature is 81° to 84° Fahr., and is little subject to variation. The rainfall is 78 inches. The mortality for seventeen years previous to 1841 was an average of 51 per 1000 annually, of which 28 proceeded from dysentery, and 7 from cholera."

Kandy.—"This town, 1678 feet above the sea and surrounded by high hills, has a very hot and close atmosphere, with very little movement in the air. The temperature is subject to variations of from 20° to 30°, the maximum being 87° to 89° Fahr. Rainfall, 90 inches. Water hard, from carbonates and chlorides. The mortality was always excessive until recently, during the years 1820-36 being 60·7 per 1000 annually, chiefly from fever and dysentery; cholera, 8. Miasmatic diseases are still the principal maladies."

Newera Ellia.—"Like all tropical mountain climates, is very damp for a considerable part of the year. The site occupies ground which ought to be healthy so far as climate and elevation are concerned, and no doubt healthy persons or people beginning to be affected by a residence in warm climates would

[1] Dr. Marshall, "Ceylon," p. 43. [2] Blue Books, 1865, xxxiii. 99.
[3] *Idem*, 1866, xliii. 283.

benefit from it; but, like all similar climates, it does not appear to answer, where persons sent to it are affected with local disease; troops might be stationed there, not to renew health, but to prevent sickness."

Trincomalee.—"This station is the most unhealthy of all. During the years 1820-36 the annual mortality was 91·4 per 1000; in 1859 it was 76 per 1000, in 1832 it was upwards of 27 per cent., or 270 per 1000. The chief diseases were—dysentery, 39 per 1000; fevers, 19; liver, 7; cholera, 14. In some years fevers predominated. The water from wells is not stated to be bad. The maximum temperature was 90°, and the variation 12° to 16°."

Galle.—"Although only within six degrees of the equator, it is the healthiest of all tropical stations. From the time of the occupation the annual mortality has been about 23 per 1000, a little more than that of the Guards in England before the recent improvements. The fort of Galle is freely exposed to the south-west monsoon, and nearly surrounded by the sea, but the land wind is considered unhealthy; indeed, the chief vehicle of malaria in the island is the land wind.

"The temperature is remarkably equal, ranging throughout the year from 79° to 82° Fahr. The highest monthly range is 85° in October, and the lowest monthly mean 77° in November; the climate is, however, very damp, and everything is liable to be covered with blue mould. During the years 1820-36 the chief diseases were—bowel complaints, liver, lungs, brain, and fever; cholera very slight.

"The water from six shallow wells in the fort was undrinkable, drinking-water being obtained from a well outside, 650 yards off. Galle owes its comparative healthiness to its local position, the small number of men in barracks and absence of sanitary defects of a serious nature existing in other stations."

The report suggests that it should be made the chief military station in the island, and recommends "the building of barracks in Colombo, with upper stories," which would be more open to the free circulation of air, very much impeded by the ramparts; but there were barracks of this description in

the fort in 1842, then recently built, although the majority were low buildings, badly ventilated, on the ground floor.

"The dry seasons are reported to be more healthy than the wet ones, and the night duties those that tell most on the health of the men." From this and other causes the officers are much less liable to disease.

The number of European troops stationed in Galle, never more than one or two companies, is too small to give a correct estimate of its climate; it has not got the reputation in the colony of being more healthy than Colombo or other places.

The mortality among the troops in India has been so much reduced of late years by sanitary measures, that there is not now much difference between it and Ceylon.[1]

In 1862 the death rate per 1000 was		In 1863.	
Bengal	27	Bengal	26
Madras	20	Madras	22
Bombay	24	Bombay	16

Complaints of the Natives.—Small-pox was formerly very prevalent among natives, but since the extension of vaccination it has much diminished among the Siṉhalese, who show no objection to it; but among the Mahometans, who obstinately refuse to adopt this preventive measure, small-pox rages periodically with great virulence; on these occasions they walk in procession round the suburbs, calling upon "Allah" to help them.

The Siṉhalese are very subject to skin-diseases; according to Dr. Davy, "every variety known appearing among them," especially parasitic or itch, also ophthalmia, dysentery, spleen, and intermittent fevers of a malarious nature. In the southern provinces, chiefly about Galle, elephantiasis is very common. There are two kinds of Cochin leg, as it is called in India—one a disease of the joints, the other tuberculated, when the muscles of the leg are converted into a kind of adipose tissue, and become distended by a yellow fatty fluid. No effectual remedy has been discovered for it; a kind of fern (*Alsophila gigantea*) and arsenic have been tried with partial success. It is generally attributed to bad water.

[1] Reports, 1865, vol. xxxviii.—1870, vol. xliii.

"Berri-Berri," a disease peculiar to Ceylon, and which rarely attacks Europeans, is a kind of dropsical asthma. A strange disease, called moon-blindness or hemeralopia, only known in the Tropics, occasionally occurs among sailors in the seaports and soldiers on the voyage out; every evening as darkness sets in, men affected with it lose all power of distinguishing objects, and have to be led about; it is said to be caused from sleeping with the moon shining on the face. The cure is as strange as the complaint—boiled ox or pig's liver being a popular cure; part of the liver is ate, and the steam of the dish applied to the eyes. Some cases occurred at Galle on board the Austrian frigate "Novara." [1]

Epidemics, such as cholera, are usually imported from India by Malabar coolies and pilgrims who cross over to Manaar, where it always breaks out first; "its visitations are irregular and independent of any known atmospheric influence," and it carries off thousands of the natives, principally in Jaffna. In 1864 there were 3578 cases; in 1865, 2727; and in 1867, 10,541, with 5926 deaths. A law was passed in 1867 containing stringent regulations to prevent this importation of disease, which it is hoped will check it in future. These "Malabar coolies are great victims to dysentery and kindred complaints, 40 per cent. of those admitted into the hospitals dying from it." Malaria fever also decimates them and the native population of the interior during periodical visitations.[2]

Hurricanes.—The terrific cyclones which cause such havoc among shipping in the Eastern seas are almost unknown in Ceylon. The hurricane of 1851, which did such mischief at Madras, was little felt in the island; but Jaffna and the northern portion come within their influence in a modified degree, and are also subject to local cyclones during the changes of the monsoons. In October, 1863, eleven vessels belonging to Jaffna were driven on shore; the most severe of all occurred in 1814, when large tracts of land were temporarily submerged on the borders of the lake. Mr. Dyke, the Government Agent, remarks, when giving a list of gales of this description which

[1] "Voy. of the Novara," i. p. 420.

[2] Report of Dr. Charsley, Blue Books, 1867, vol. xlviii.

have occurred since 1814, "that accounts of the height to which the cyclone wave rises in the upper part of the Bay of Bengal, and the consequences to low-lying districts, are calculated to suggest apprehensions for Jaffna, which is generally not more than ten or twelve feet above the sea."

In 1805, H.M. ship "Sheerness" and two others were driven on shore at Trincomalee, and the storm of 1845 was felt there.

List of years in which gales have occurred at Jaffna since 1814 :—[1]

1827	1853
1829	1855
1836	1856
1844	1858

1859

Snow—is never seen, but hail occurs occasionally in the interior. Dr. Davy[2] mentions that in 1819 a storm of wind was followed by hail of large size, which fell in great quantities, and a similar storm occurred at Matele in 1857. In India hail storms are more frequent, and the hail is stated to be sometimes of fabulous dimensions, pieces the size of an elephant having fallen, we are told, at Seringapatam.[3]

Waterspouts—are common objects at sea along the coasts, but rarely pass over the land.

Tinted Seas.—Sir E. Tennent mentions a reddish appearance seen occasionally in the sea off Colombo, which seems, from his examination of some of the water, to be owing to microscopic infusoria or animalculæ similar to the *Trichodesmium erythræum* of the Red Sea. *Vide* ch. xxix.

Optical Phenomenon.—A kind of "anthelia" or "glories" as they are called, are seen sometimes on the damp grass in the morning when the sun is very near the horizon, and the shadows of a person are thrown at length on the ground; the head and upper part of the body appear surrounded by a brilliant halo. Dr. Thompson, in his "Meteorology,"[4] men-

[1] Reports of Governors, 1864. J. A. S. Beng. 1845, p. 889.
[2] Davy, "Ceylon," p. 73.
[3] Thompson, "Meteorology," p. 176.
[4] Thompson, "Meteorology," pp. 230, 245.

tions many singular cases where this beautiful phenomenon has been seen in Europe; one was observed at Oxford in 1762, and at the Faulhorn in 1841. M. Bouguer, a traveller, mentions that being with others upon the summit of one of the Cordilleras, and the sun just rising behind them, each saw his own shadow projected with a glory surrounding the head. The "anthelia" consisted of three circles of prismatic colours, red being external.

Buddha Rays.—A luminous phenomenon consisting of horizontal bands of light which cross the sky while the sun is in the ascendant, has been called Buddha's rays by the natives; who attach an importance to their appearance as indicating some calamity. These appearances, as well as mock moons, parhelia, &c., are common objects in the arctic and cold mountain regions where snowy specula or minute crystals of ice float abundantly in the air. In the high regions of Ceylon, where the rays only occur, the quantity of vapour in the atmosphere acts probably in a similar manner. It is curious that the extreme of heat and cold should produce the same effects in the air—a sun-set in the desert of Arabia and one during an intense frost in a cold climate presenting the same appearance.

Fogs—are frequent on the south-eastern coast at sea, which make the land appear further off than it really is, and are dangerous to shipping.

Population.—It is supposed from the number of ruins of former cities and the prodigious size of the tanks in Ceylon that the population was much greater formerly than at present. Forbes, in his work on the island, estimated the ancient population at 5,000,000; but it has most probably only changed its locality. The parts which were densely peopled being now jungle.

During the Dutch *régime*, the population diminished, and was estimated at considerably less than a million when it came under British rule, but has more than doubled since then, being in 1871, 2,405,287. During the last thirty years there has been a large immigration of Malabar coolies, who are employed on the coffee estates.

In 1862 the population was distributed as follows :—

——	Inhabitants.	Square Miles.	Inhabitants to a Square Mile.
Western Province . .	594,756	3,820	160
North Western Province	192,315	3,362	60
Southern ,, .	322,258	2,147	150
Eastern ,, .	79,046	4,753	19
Northern ,, .	410,697	5,427	80
Central ,, .	277,397	5,191	40
	1,875,467	24,700	——

The Colonial Office List for 1875 makes the

Number of Males	1,281,524
Females	1,119,542
Total	2,401,066

Great difficulties are experienced in obtaining correct returns of the population, in consequence of the prejudices of the natives and their unwillingness to give information to the authorities.

Mr. Fergusson, editor of a local paper, estimated the population in 1868 as follows :—

Natives	2,336,000
Burghers (European descent) and persons of mixed blood .	5,000
Europeans	3,000
	2,344,000

The natives were made up of different races as follows :—

Sinhalese, Kandyan and Maritime	1,450,000
Tamils or Malabar	750,000
Moormen	130,000
Malays, Javanese, Kaffirs, Negroes, Afghans, Arabs, Persians and Parsees	4,000
Aborigines, Veddahs and Rhodiahs	2000
Total Natives	2,336,000

The European population was made up as follows, wives and families included :—

Military	1,500
Civil servants	250
Planters	1,000
Professional men, Merchants and their employés, Tradesmen, Artizans, &c.	250
Total	3,000

Vide Reports—1867–8, xlviii.
,, ,, 1862, xxxvi.
,, ,, 1863, xxxiii.

In 1863 the number of persons engaged in agriculture was 778,000; manufactures, 66,000; commerce, 107,000; total 951,000 in round numbers, out of a population of nearly 2,000,000. It is not stated how the remainder were engaged. (Rep. 1866.)

CHAPTER VII

ANCIENT SINHALESE HISTORY.

The Aborigines.—The possession of a canoe with an outrigger, which is peculiar to the Eastern Archipelago and Polynesia, has led to the conjecture that the Sinhalese must have come from these parts of the world;[1] however, the fishermen of Ceylon are said to be Tamils, and there can be no doubt the Sinhalese are of Hindu origin. Their plough is identical with that of Dinapur and other parts of Bengal—even if they had come from the Indian Archipelago there would be nothing extraordinary in the circumstance. Sir C. Lyell in his "Principles of Geology," (ch. xliii.,) gives a number of instances where canoes have drifted with people in them immense distances in the southern oceans. There are several well-authenticated cases of their having been carried by wind and waves from Sumatra to Madagascar. And there is the extraordinary instance mentioned by Friar Mauro of an Indian vessel which was carried by a storm in 1420 past Madagascar in a south-west direction during forty days without seeing anything but sky and water, returning when the storm abated. However, it is doubtful if the Veddahs or Aborigines of the island who were in possession when the first recorded Hindu invasion took place about 500 B.C., are of Hindu origin, they more probably were formerly connected with the Aborigines of the Archipelago and Australia, and identical with those of India, such as the hill tribes of Concan in the Ghauts, and other parts of the peninsula, whose ancestors possessed the whole before the Hindus.

The Aryan population of India are generally supposed to

[1] Tennent, ii. 327

have descended into it about 3,000 years since from the north-west, gradually subduing all the open and cultivated tracts of Bengal and the peninsula south as far as the Deccan, but not further. In the Deccan the original tenants of the soil are still in possession, but in other parts of India they have been hunted into the hills.[1] While in Ceylon they are confined to the jungles of the north-eastern district. The aboriginal races of India differ in every respect from Hindus; they have no prejudices against animal food, whether the animal be slaughtered or die naturally. Their government is strictly patriarchal, they continue to make human sacrifices, and worship power in any shape to avert danger—as tigers, bears, or venomous snakes. They are all isolated from each other, each tribe speaking a dialect of its own. Some are stated to be found in the Malay islands and in the Chinese hills beyond Canton,[2] and are doubtless identical with the dwarfish and half-imbecile races mentioned by Ptolemy, the "Periplus" and Arabian geographers, as being scattered in various parts of the East, who are described as having big heads covered with long hair, dwelling in rocky caves, bringing goods to the frontiers of Thin, gathering pepper in Malabar, and bargaining with cloves in the Archipelago. Kazwini speaks of little hairy men with tails (?) in el Ramni, having a language like the chirping of birds; and Marsden also heard of these wild aboriginal tribes in the interior of Sumatra who kept aloof from the other natives of the Indo-Malay type. Marco Polo mentions them, and in fact every mediæval traveller has given his quota of strange description, including Fa-Hian's and Hwen-Thsang's female demons in Ceylon decoying strangers to their destruction by their arts.

The "Journal of the Asiatic Society of Bengal" for 1855 and 1856 contains a memoir on an unknown forest race of Indian Veddahs resembling those of Ceylon, found in the jungles of South Palmow near the Nerbudda, called Puttoos or monkey people, having short flat noses, long arms, and speak-

[1] J. A. S. Beng., 1848, xvii. 551; Asiat. Res., x. 24; Latham, Races of Men; Lassen, Indis. alter., i. 198.

[2] Major Gen. Briggs, Report Brit. Assoc., 1850, p. 160.

ing an unknown language; they are all but naked, the women only wearing a few leaves round their loins.

Several ancient authors, among them Herodotus, mentions that there were two races of Ethiopians—one in India and one in Egypt, and that the Africans came there from India.[1] There are many indications that a black race of African or Australian type, having thick lips and woolly hair, formerly dominated in India; for instance, the numerous representations of these features in the rock temples of India. Megasthenes compared the inhabitants of Bengal to Abyssinians, and Sir W. Jones was of opinion a black race formerly possessed the whole of Asia. All the Aryan traditions represent that when they arrived in India they found the Peninsula and Ceylon occupied by a black race, from their description more like Australians than anything else, stigmatised as Daityas and Rákshas, or savages and demons. Certainly the Veddahs with their ill-shaped limbs, large heads, shaggy hair, wide nostrils, projecting jaws, mouths and teeth, approach very near the Australian type, and, compared with some of the hill tribes of India—those of Cochin for instance, and even with the Australians—are the least civilized of all in some senses of the term.

The probability of comparatively recent geological changes in India has been discussed in Chap. III. It is thought the great Southern Archipelago, supposed to have existed, was occupied by a black race comprising many tribes, probably pre-historic man. As the ocean encroached on the lower lands and submerged them, there would have been a deluge, perhaps that of Noah, only a few escaping in the hill districts, the progenitors of the present tribes, thus isolated from their brethren of Australia and Africa. As the land of India again rose and became habitable after centuries, the Hindus poured into it from the north, and displaced the original possessors.[2] This theory may account for the strange isolation of the Andaman islanders, who have often puzzled naturalists as to how they came there. In the "Report of the British Association" for

[1] An account of the Veddahs is given in ch. xix. It is said that none of the Egyptian mummies which have been examined have any resemblance to the negro. *Vide* Casteras, notes to Browne's Travels.

[2] Murray, Geog. Dist. of Mamm., p. 62; Proc. Geolog. Soc. 1868, xxiv., 494.

1861 there is an account of the Micopies given by a Brahmin sepoy who escaped from the convict settlement in the islands, and lived a year among them. A skeleton of an adult male of one of these pigmies was also sent to the British Museum from India; it is 4ft. 10in. in height, and as perfect in its formation as one belonging to the most favoured race could be. They are remarkably strong, and have very black skins.

Professor Owen is of opinion they bear an affinity to the Veddahs of Ceylon. "The crisp hair in small tufts has a resemblance to the Papuan, but the skull and dentition of the Andaman male are as distinct from the Australian type as from that of the West Coast negro. Upon the whole the skull offers the greatest amount of correspondence with those of the dwarfish and presumed aboriginal inhabitants of the Philippines, Java, Borneo, and Ceylon. The cranium of a Veddah (No. 5539) in the College of Surgeons, London, has a cranial cavity of small size, with forehead narrow and receding. This skull, probably that of a female, agrees in the chief characteristics with the Philippine (No. 5531). The Andamans, like Java and Ceylon, may have been parts of some former dry tract of land distinct from the Indian continent." Strangely enough some stone implements, similar to those discovered in Western Europe, have been recently found in Southern India when making cuttings for the Madras railway.[1] Besides the Aryans, there has evidently been a large Scythian migration to India. Some of the numerous hill tribes resemble Tartars indeed the great mass of the Indian population, especially in the south, is Turanian, all using the Tamil and allied languages being non-Aryan,[2] and the people speaking them are supposed to have reached India by the same route as the Aryans, but as they could not have moved south if the north was occupied by the Aryans, they must have preceded them; yet there is nothing to prove such was the case, they have left no trace behind them in the north. Mr. Curzon says, "the traditions of the Tamils do not reach back to a period of their history which should relate to themselves as a people distinct from the

[1] Jour. Geolo. Soc., 1868, xviv. 494.

[2] Hodgson, J. A. S. Beng., 1853, xxvii. 126. *Vide* ch. xxii.

Aryans, they have no ancient literature, their religion, laws, and medicine, are all of Hindu and Sanskrit origin." However, his views on this subject are disputed by Dr. Caldwell and others.

The statements of the Hindus that the aborigines of India and Ceylon were demons, savages, and monkeys, is repeated by the Chinese travellers, who seem also to have confounded them with sirens.

Fa-Hian says this kingdom was not formerly inhabited by men but by demons and females living in the interior, who, covered with flowers and perfumes, and playing musical instruments, allured by their charms and melody merchants and strangers on the coast to their destruction.[1] Hwen-Thsang adds, by their beauty and flatteries they succeeded in decoying their victims into an iron town, where, after a carousal with them, they were imprisoned in an iron cage, and ate one after the other.[2] The mode of bartering practised by the Veddahs is mentioned by Fa-Hian, who remarks: "Yet people and merchants of different countries resort to trade with them. When the time for trading arrives the demons do not appear in person, but their goods are left with the price marked on them in a certain place where the merchants could come and take them if they suited." In Ma-Touan-Lin's Chinese dictionary, translated by M. Julien, "Journal Asiatique," 1836, the natives are represented when trading with foreign merchants as hiding themselves, leaving gems to be exchanged for other wares, but there is no allusion to the female demons.

This cautious mode of trading between aborigines and more civilized people was not confined to the Veddahs, as implied by some writers on Ceylon, but has been practised in many parts of the world from the most remote periods. Cosmas mentions it on the eastern coast of Africa, and Speke at the

[1] Beal's Fa-Hian, p. 149; Julien's trans. Chartron's Voy., ii.

[2] "Elles épiaient constamment les marchands qui abordaient dans l'île, et se changeant en femme d'une grande beauté elles venaient au-devant d'eux avec des fleurs odorantes et au son des instruments de musique, leur adressaient des paroles bienveillantes et les attraient dans la ville de fer. Alors elles leur offraient un joyeux festin et se livraient au plaisir avec eux, puis elles les enfermaient dans un prison de fer et les mangeaient l'un après l'autre."—Mém. des Contrées Occiden., par M. Julien, p. 131.

present time; it was also practised until quite recently by the Nayarees of Malabar.

Cæsar Frederick describes the Portuguese trading for gold with the Kaffirs of the Mozambique Channel in the same way.[1] Herodotus (iv. 196) relates, that the Carthaginians, when trafficking with the natives of Africa on the other side of the Pillars of Hercules, placed their goods on the shore, and lighting a fire returned to their vessels in the offing; when the natives saw the smoke, they came and examined the things, placing as much gold near them as they thought the goods were worth. When the natives retired the Carthaginians again landed to see what quantity of gold was offered; if there was not enough they returned to their vessels and waited until sufficient was placed.

Albyrouni (A.D. 1030) and Kazwini (1275) mention the same mode of trading with the cannibals of some islands of the Archipelago, and the dread their sailors had of them, saying, they left their goods, salt, &c., on the shore,[2] and found next day in the same place a quantity of cloves equal in value.

Pliny, in his account of the Siṅhalese embassy to Rome, in the reign of Claudius, represents the ambassador as saying, his father had traded with the "Seres" beyond the Himalayas in a similar manner. Sir E. Tennent[3] applies the

[1] Hakluyt, Coll. Voy., ii. 242.

[2] "Le girofle s'appelle en Sanskrit lavanka, sans doute parcequ'il vient d'un pays de ce nom, Lavanka, qui ne s'éloigne pas de Lanka. Les marins se réunissent pour dire que lorsque les navires sont arrivés dans ces parages les hommes de l'équipage montent sur des chaloups et déscendent à terre pour y déposer soit de l'argent, des pagnes, du sel, etc.; le lendemain quand ils reviennent, ils trouvent à la place une quantité de girofle (cloves) d'une valeur égale: on ajoute que ce commerce se fait avec des génies ou des hommes restés à l'état sauvage, et que ceux qui ne craignent pas de s'avancer dans l'intérieur de l'île n'en sortent plus. D'après Ramayana, au delà du pays du Sindil y a un peuple qui mange les hommes; toutes les personnes qui voyagent sur mer savent que si les habitans de Lankalabous sont sauvages c'est parcequ'ils sont anthropophages."—Reinaud, Mém. sur l'Inde, p. 343, also Géo. d'Aboulféda, p. ccxviii. "Insula Barthabil insulis Zanig propinqua, * * *; mercatores depositis in litore mercibus suis, in navigia redeunt ibique exspectantis manent. Mane apud quamvis mercem copiam caryophyllorum inveniunt quæ si placet, eam relicta merce capit mercator, etc. * * * ibi homines vidisse feros vultu Turcis simili."—Kazwini, Opera; Gildemeister, Script. Arabum, etc, p. 202.

[3] Vol. i. 593, ed. 1859.

account of Pliny and Albyrouni to the Veddahs of Ceylon, but it is evident the former was referring to some tribe on the Chinese frontier north-east of Bengal. Pomponius Mela, (A.D. 43,) also describing these races, says: "the Seres come between the two, a race eminent for integrity, and well known for the trade which they allow to be transacted behind their backs" (lib iii. 7). Dr. Vincent, in his "Periplus," refers this description of Pliny's to the Seres, who were, he thought, identical with Ptolemy's "Besadi," and was speaking of the overland trade between India and China by Arracan. See also "Syme's Embassy to Ava." It is equally certain the Arabians were not referring to Ceylon for many reasons; they represent their sailors obtaining cloves from the savages in exchange, which are not indigenous to Ceylon, and the Veddahs never were cannibals, while the natives of some of the islands in the Archipelago have been known as such from the time of Ptolemy, particularly the Sumatrians, whose cannibalism is mentioned by Friar Odoric, (1318,) Di Contei (1444,) and Marsden, who says, they practised it up to 1780 (p. 390). Pigafetta (1519) mentions that the natives of Sulach and other isles of the Molucca group were also cannibals.[2]

Sir E Tennent inserts in a note part of the passage in Albyrouni given here in full, from Reinaud's "Mémoire sur l'Inde" (who thought it did not refer to Ceylon), but appears to have overlooked the remainder, where this Arabian distinctly refers to some part of the Archipelago he calls Lanka-labous, a name given by most of the Arabian geographers to the Nicobar Islands, which Albyrouni appears to have confounded with the Spice Islands, as the clove is remarkable for its limited geographical distribution, being only native in the five small islets comprising the Moluccas,[1] although they are grown at present in large quantities at Zanzibar and other places where they have been recently introduced. The Sanskrit term '*lavanga*,' quoted by Albyrouni, is probably derived from '*lawang*,' the Malay name of this

[1] "Gli habitatori sono huomini saluatechi et bestiali et mangiano carne humana." Ramusio, Viaggia, i. 406, ed. 1554.

[2] Rumphius, Herbal Amb., ii. 4; Marsden and Williams' Dict., pp. 863, 891.

spice Col. Yule remarks, in a note to his "Marco Polo:" "The Nicobar and Andaman Islands are believed to be the Lanja-balus, or Lanka-balus, of the old Arab navigators; two races inhabit them, one an aboriginal tribe in the interior, a remarkably savage looking set with projecting teeth and woolly hair. Of late years there have been frightful disclosures regarding the massacres of ships' crews wrecked on the islands, which led to their occupation by the Indian Government; one woman acknowledged having seen the crews of nineteen ships massacred."

If we assume Zanig to mean Java, Kazwini's "insula Barthabil" would refer to the Spice Islands; Kazwini may have meant Borneo, which is quite close to the Moluccas. In the notes to Lane's "Sinbad," Barthabil is spelt Bartail; the editor remarks: "the island of Kabil of 'Sinbad' is evidently Kazwini's Bartail, I suppose not far from Borneo." There is also a translation of a passage in Ibn-el-Fakeeh similar to those in Albyrouni and Kazwini about cloves; the natives are represented as having long hair like women, no beards, and yellow faces, like Turks,[1] a description which seems to refer to the Chinese.

We know little about the aborigines of Ceylon in primitive times, except that they worshipped snakes,[2] the prevailing religion being the demon or Yakka worship, and the island is fabled to have been inhabited at one time by "Nágas," a race of giants, superior to ordinary men, who had constant access to the Heaven of Indra, the god of air, chief of aërial beings.

Ptolemy mentions an island and a town called Nága-dwipa, somewhere to the north-east of Ceylon, which he separates from it, although evidently referring to the island itself, and the "Mahawanso" distinguishes the northern part as "Nága-dwipa," which appears to have referred especially to Jaffna. The island was called Snake Island, much in the same way that Rhodes acquired the ancient appellation of Ophiusa. Strabo (xiii. 588), Pliny (vii. 2) and Ælian (xvi. 28) mention

[1] Vol. iii. 84.

[2] Turnour, Epitome, p. 43, intro. pp. xlv., lxxxvii; Mahaw., Rajavali, p. 169.

a race of people half snakes, called Ophiogines of Parium, near the Hellespont, who possessed the charm of curing persons bitten by snakes. All these names doubtless originating in the snake-worshipping habits of the inhabitants.[1]

Buddha is said, on the doubtful authority of Mahanamo (*Vide* ch. xxi.), to have paid two or three visits to the island about B.C. 560, when he converted the Nága king. From these meagre accounts the natives appear to have been more or less civilized and to have known the art of spinning, while the island was divided among a number of petty rulers. The throne of their king is described as being formed of gems, probably an oriental trope, but showing the early reputation of the island for precious stones, and Kuweni, the daughter of a chieftain, is represented as giving rice, which was obtained from ships wrecked on the shores, to Wijayo and his followers when they landed,[2] which would imply it was not produced in the island but imported from India, as it is in great part to the present day.

It is doubtful if these accounts refer to the Veddahs, but to some colonists from Northern India, who preceded Wijayo, and speaking the Elu language, which the "Mahawanso" represents as being the vernacular of the island when he landed and introduced the Pali. (*Vide* ch. xxii.) According to some investigations Max Müller has been making, the corrupt dialect of the Veddahs contains "a remnant of words of which he can make nothing," probably their original tongue, now largely mixed with words derived from intercourse with the Sinhalese and Tamils. Presuming the Veddahs to be connected with either the hill tribes of Southern India, or the aborigines of Australia, they could not have spoken Elu, which is a dialect of Aryan origin and possessing an ancient literature, nor is it likely that aborigines of the Australian or Indian hill tribe type in those early days could have arrived at the amount of civilization implied by the importation of rice, and their king's throne set with gems. In common with

[1] *Vide* ch. xxiii. Casie Chitty, Cey. A. S. Jour., 1848.
[2] Mahaw., ch. i. 5 ; vii. 49, 53.

many of the hill tribes the Veddahs never appear to have practised any art, or to have had a king or a literature.

It may be asked, if the Veddahs are of Aryan lineage, as supposed by some, what has become of the aborigines of the island? All accounts agree that the aborigines of India are not Aryan, and they are still numerous in the peninsula; are we to suppose that there were no aborigines in Ceylon, or that they have been exterminated? Aryan tradition represents the island as peopled by Daityas, and there is no account given of their total destruction. (*Vide* ch. xix.) With regard to the Dravidian emigration there is reason to suppose it did not reach the island or extend farther than Southern India until long after Wijayo, although some have supposed the Tamil emigration to have proceeded from Ceylon northward, and that they came originally from Malay.[1]

Opinions of the Portuguese.—The Portuguese and Dutch, as stated in Chapter I., imagined that the Chinese were the first who discovered and peopled Ceylon, but this theory does not bear investigation; none of the Siṉhalese have the least resemblance to the Chinese or Tamils either, nor is there any allusion in any of the Chinese travellers or annals to their ever having settled in the island.

Ráma's Invasion.—This legendary event, as recorded in the "Ramayana," when Ráma went in search of his wife Sitá, who

[1] Curzon, J. R. A. S., xvi. 193. Professor Max Müller in his discourse to the Congress of Orientalists delivered in London, Sept. 17, 1874, says, "We have been told again and again that the Veddahs in Ceylon have no language. Sir Emerson Tennent wrote 'that they mutually make themselves understood by signs, grimaces, and guttural sounds, which have little resemblance to definite words or language in general.' When these statements were repeated, I tried to induce the Government of Ceylon to send a competent man to settle the question. I did not receive all I wanted, and therefore postponed the publication of what was sent me. But I may say so much, that more than half the words used by the Veddahs are, like Siṉhalese itself, mere corruption of Sanskrit. There is a remnant of words in their language of which I can make nothing as yet; but so much is certain—either the Veddahs started with the common inheritance of Aryan words and ideas, or, at all events, they lived for a long time in contact with Aryan people, and adopted from them such words as were wanting in their language. If they now stand low in the scale of humanity, they once stood higher; nay, they may possibly prove in language, if not in blood, the distant cousins of Plato, and Newton, and Goethe."

was stolen by Rávana, the giant king of the island, is stated to have occurred B.C. 1810, and after a bloody war of twelve years' duration the husband of this eastern Helen succeeded in recovering her from the castle of Lanka, at Sitta-wacca, where she was hid.

Professor Williams, in his analysis of the epic poem called the "Ramayana" (1863), is of opinion "from internal evidence that the events recorded in it were the theme of minstrels long before they were reduced to writing, which could not have been earlier than the fifth century B.C.," a more ancient date than is generally ascribed to any Hindu writings. (*Vide* ch. xxii.) The reef of rocks which partly connects the island with the continent is still called by the Hindus "Ráma's Bridge." There is a monument in the island of Ramiseram, supposed to have been built in commemoration of the invasion, and the idol in the temple is still annually washed with the holy waters of the Ganges, while thousands of pilgrims resort thither to witness the festivals. The town of Sitta-wacca, thirty miles east of Colombo, is supposed to derive its name from Sitá having been confined there; but the Faker, whose travels are given in the "Asiatic Researches," (vol. v.), places the "Sitá-khond" of the "Ramayana" at Newera Ellia, or the vicinity. Notwithstanding the fabulous nature of this recital there is reason to suppose it was founded on fact, and that some invasion of the island did take place; it is very probable the monkeys said to have been employed by Ráma in this war were some of the aboriginal forest or hill tribes of Southern India, engaged to aid him in his undertaking.

Mr. Curzon thinks Rávana was prince of the southern Tamils. Indian legends say, that in consequence of this war, Lanka was depopulated of civilized people and remained in that state for 1845 years, being only inhabited by Daityas or savage tribes; it is also said in the Surya Siddhanta, that at this time Maya, the offspring of the Sun by the daughter of the divine Twashta in the west, came from Rome to honour the sun on Salamala.[1]

[1] Wilford, Asiat. Res. x.

Another fabulous invasion of Ceylon (B.C. 704) from Kashmir, is recorded in the "Rajatarangini" (lib. iii. c. 446).

Landing of Wijayo.—The first definite information of the colonizing of the island is derived from the "Mahawanso,"[1] which describes, with the usual amount of oriental romance, the landing, about the year B.C. 487, of Wijayo and his seven hundred followers, who are supposed to have been Pali, or Prassi, from the neighbourhood of Palibothra, the modern Patna on the Ganges.

The pedigree of this successful adventurer is very dubious, being according to some accounts quite fabulous;[2] he was probably a freebooter or outlaw, induced by accounts of the riches

[1] Ch. vii. ; the date of the landing given in the "Mahawanso" is B.C. 543, but this it will be seen is incorrect. M. Burnouf, in the "Journal Asiatique" for 1857, p. 54, tries to identify the mouth of the Godavery, anciently called Bandarmaha-Lanka, as the place Wijayo sailed from. The "Rajavali," p. 163, says, "Wijayo sailing along the coast saw Adam's Peak and landed." Another native tradition says he landed near the Wanny.—A. R. Pakse, Asiat. Res., vii. 443. The same vol. of the "Asiatic Researches" contains an essay on Ceylon by Captain Mahony.

[2] An Indian princess, daughter of the king of Kalinga, left her father's palace to follow a band of travelling merchants, when, passing through a forest in the kingdom of Lala (Dessa), she was carried off by a lion into the depths of the woods, where she gave birth to twins, a son and daughter. The young prince, when sixteen years of age, learning the secret of his birth from his mother, escaped with her from the forest and went to live with his grandfather. The lion, who ravaged the whole country in despair at the loss of the princess, was eventually killed by the young prince, who married his sister; their eldest son Wijayo, being naturally of a lawless disposition, was put by his father on board a vessel with 700 followers, half of their heads being shaved, and sent adrift on the ocean, eventually landing in Ceylon. Fa-Hian (A.D. 399 to 412,) repeats the story, but places the scene in the island. Hwen-Thsang, another Buddhist pilgrim from China, A.D. 648, also mentions it, but adds, "according to some authors Singkia-la, meaning Wijayo, was the son of a merchant who succeeded in exterminating the female demons and established his kingdom," referring, no doubt, to the merchant with whom the princess eloped. "Mém. des Contrées Occidentales," par M. Julien, i. 198, ii. 125; Jour. Asiatique, 1857-61; Mahawanso, ch. vi. 47, 52. This invasion is also alluded to in Matouanlin's Chinese dictionary, called Wan-hien-thoung-khao, which clearly explains the motives, and disposes of the fabulous account of it, saying "Ceylon has been known to the Chinese since the era of the "Tcew"—between A.D. 317 and 420. The "inhabitants of other countries hearing of the delights of this land resolved to attack it, hence came the name of the 'Island of Lions'; the habits of this people were the same as the Po-lo-men—(Brahmins)—they did not always follow the law of Foe."—Jour. Asiatique, 1836, p. 403.

and beauty of Ceylon to make a descent on it, and encountering no opposition from the natives made himself master of the island, and founded the Sinhalese dynasty, establishing his capital at Tamana Newera, in the north-western province.[1]

Wijayo married Kuweni, daughter of one of the chiefs of the island, who is described in the accounts given of the event as "seated at the foot of a tree spinning, when he landed, and advanced towards her by himself, his followers having been 'spirited away' by her sorceries; but terrified by his threats she restored them, and invited the hero with his followers to a carousal, an invitation accepted with hesitation, fearing some treachery, and not without taking due precautions, relying on the threads worn by Brahmins to protect[2] them from the evil designs of the 'Yakkaheni and her nágas.'"

Turnour, in the introduction to his "Mahawanso," points out the extraordinary resemblance between the account of the landing of Wijayo in Ceylon and that of Ulysses in the island of Circe, adding that it would be difficult to defend Mahanamo from the imputation of plagiarism, had he lived in a country in which the works of Homer could by any possibility have been accessible to him; the whole story is almost identical He also remarks, the "Tika" adds nothing to explain the fabulous origin of the Sihala dynasty; probably Wijayo's grandmother had connected herself with some obscure individual named Siho (or lion), and her progeny and followers were banished. The circumstance mentioned in the "Mahawanso" (p. 46), that half their heads were shaved, looks as if they were criminals of some sort. Max Müller doubts the existence of Wijayo altogether, and the "Dipawanso" chronicle omits all mention of the lion story.[3]

Kuweni, whose influence with her countrymen was instrumental in the success of Wijayo, was subsequently in the

[1] An account of this ancient place by Casie Chitty is given in the J. R. A. S., 1840.

[2] The "Mahawanso" represents Wijayo and his men as tying threads on their arms to protect them from the sorceries of the Yakkas, which, as they were Brahmins, evidently meant the "Zemmar" worn by them to the present time.

[3] Hist. Sansk. Lit., p. 268.

height of his power discarded for a Pandyan princess brought from India, who came in great pomp accompanied by horses, chariots, and artizans, through whose means the arts and language of the Continent were introduced into Ceylon. Wijayo dying without issue by the Pandyan princess, was succeeded by his nephew brought from India, who married a relation of Buddha; the children of Kuweni were not considered eligible, being "nágas."

Like William the Conqueror and his barons, their Indian prototypes dispersed themselves over the island, which they divided among them, becoming its chieftains and lords of the soil.[1] They and their successors following the same pursuits as the Aryan races to which they belonged, applied themselves entirely to agriculture, making tanks and rearing cattle; the tillers of the soil formed the Vellales or highest caste; trading was despised as a mean, low employment, and left to strangers on the coast. The patriarchal feudal system and serfage were established, the whole of the produce of the soil belonging to the head men; the people of each district were obliged to follow their chief when called in time of war or other necessity; the boundaries of every village, field, and garden in Lanka, we are told in the "Mahawanso," were fixed and arranged A.D. 437 (p. 67)

Ceylon was anciently divided into three provinces. The northern division bounded on the south by the Mahavilla Ganga and Dedra-oya rivers was called Phiti-ratta or Raja ratta, containing the ancient capitals and royal residences; the southern province was called Rohana or Rohuna; and the mountain district Malaya or Maya-ratta.[2] Part of the feudal system established by Wijayo remained in force until 1843, when domestic slavery was abolished by a decree from the Home Government.

Probably encouraged by Wijayo's success, the Tamils or Damiloes as they are called in the native chronicles, from South-

[1] "The followers of the prince formed an establishment each for himself, all over Sihala, giving them their own names." Mahaw., ch. 55; Turnour, Epitome, pp. 12, 24. *Vide* also ch. xvii.

[2] Turnour, Epitome; Rajav., p. 185.

ern India, founded a Malabar kingdom at Jaffna at a very early period, where their descendants still form the principal part of the population. The arrival of the Tamils at Jaffna is recorded in a Hindu history or poem called "Kylasa Mala," written in the Tamil language, of which a translation is given in the "Asiatic Journal" for 1827; it states they settled in the north (B.C. 250), but no reliance is to be placed on this fabulous production. The "Mahawanso" mentions several invasions of Tamils about the same period, but the Pandyan chronicles contain no notice of any Tamil invasion or settlement in Ceylon previous to the Claudian Embassy.[1] In Taylor's MS. descriptive of Tamil country, no mention is made of Ceylon, Cape Comorin being their most southern point.

Ancient Social State.—There are many evidences of a comparatively high state of civilization existing in the island from a very early period to the time of Fa-Hian, who describes the splendours of the Royal City, supposed to refer to Anuradhapura; its "straight and level streets and highways lined with handsome houses, the abode of magistrates, nobles, and foreign merchants (sapho);[2] numerous dagobas, temples, and public buildings, with preaching halls in every thoroughfare where the tenets of Buddha were proclaimed." (*Vide* ch. x.)

Some native works of the seventh century A.D., quoted by Sir E. Tennent and Forbes, give a glowing account of their cities, whose streets were all named and numbered, containing houses two stories high; but the authority is questionable, as it seems to have been taken from a description of the ancient capital of the Kings of Oudh given in the "Ramayana."[3] We have no means of knowing how the urban population were really housed then; at the arrival of the Europeans native habitations in the towns were wretched; but the vicissitudes of ancient civilization have been great. Mud hovels now defile the sites of the marble monuments and stately cities of antiquity in Greece and elsewhere. According to the chronicles, Anuradhapura and Pollanarua were of vast extent, and the

[1] Priaulx, J. A. S., xviii. (*Vide* ch. ix.)
[2] The term Sapho is supposed to mean Arabians.
[3] Tennent, i. 494; Mrs. Spiers' India, p. 99.

number of ruins now spread over a wide area testify to their truthfulness on this point; indeed, the voice of the past speaks out eloquently from these ancient remains triumphant over the decay of centuries, and tells of a grandeur long passed away, while the withering hand of time has mouldered dynasty after dynasty to dust.

The "Dipawanso" speaks of a subterranean tunnel to supply Anuradhapura with water, A.D. 66,[1] and the "Mahawanso" describes its luxurious public gardens, palaces, baths, almshouses, hospitals, and ambulance halls (p. 67); "a city conservator," and guards stationed in the suburbs maintained order, night-men and Chandala scavengers kept the streets clean. The dead were interred in cemeteries by a body of men appointed to the office, and cremation was also practised, but seems to have been confined to the upper classes. The body of Elala, the Malabar chief, was burnt on the spot where he fell, B.C. 161. Rest houses were built for the accommodation of strangers; barbers stationed at the city gates on festive occasions attended to all who wished for their services, and alms were distributed to all in need. Aromatic drugs and perfumes were sold in the bazaars, as well as the varied products of the loom, silk turbans and cotton cloths.[2]

The King drove out in a state carriage with four white horses of the "Sindhawa" breed,[3] and according to Fa-Hian, much time was spent in religious processions and ceremonies. Stately elephants richly caparisoned and crowds of priests thronged the streets, which were thickly strewn with flowers giving out delicious odours, and the houses decorated with white cotton cloths enhanced the brilliancy of the scene. Great part of the urban population seems to have been composed of ecclesiastics, who dined in common at the King's expense; the "Mahawanso" describes various sovereigns as doling out rice to them with their own hands. Even the animals, we are told, were cared for through the influence of the benevolent precepts of Buddhism—frequent ordinances prohibited their destruction; one king devoted the corn of a

[1] J. A. S. Beng., vii. 933. [2] Mahaw., xxiii. 139. [3] *Idem*, p. 186.

thousand fields to his cattle,[1] another ordered them to be fed with straw covered with honey, probably an Oriental trope, while a third gave rice to the squirrels in his garden. Neither was the country neglected. Vast works for irrigation and reservoirs distributed the fertilizing liquid over fields of golden grain, now a wilderness of rank jungle teeming with malaria. Fa-Hian says the island never knew famine or scarcity.

The agricultural population were distributed in small village communities and hamlets with gardens ("watte"). Their organization and the planting of fruit trees[2] by the King's command, is often alluded to.

Village communities cultivating land in common existed in Northern India in the time of Alexander, being mentioned by Strabo and Arrian, ch. xi., while some of the edicts of Asoko refer to the planting of fruit trees and digging of wells near highways for the use of men and animals. Much attention was also given to flowers, used to profusion in Buddhist temples. "Millions of flowers were given, we are told by the chronicles, in a single offering by pious kings, dagobas festooned with them on festive occasions from top to bottom, and the hill of Mihintala buried under a heap of jessamine."

Before the destruction of the tanks the rural population must have been very dense, especially in their vicinity, even allowing for the exaggeration of the chronicles, and the fact that a mere hamlet with a few inhabitants ranked as a village.

According to the "Rajavali," the three divisions of the isle contained 1,470,000 villages—450,000 in Phiti, 770,000 in Rohuna, and 250,000 in Malaya (p. 262).

In those days the ecclesiastical influence was predominant; the dying monarch Dutugaimunu, who professed himself the slave and patron of the priests during his reign of twenty-four years, draws an evidently faithful picture of the times, when exhorted by a Théro he described all he had done for his church, seeking for consolation amid the agonizing terrors of approaching dissolution, in recalling them to mind. "By his command, an official read from the public register the record

[1] Mahaw., Upham's, p. 246. [2] Mahaw., p. 215.

of his munificence." He had constructed the maha thupa and ninety-nine wiharas at great cost; clothed the whole priesthood three times, giving three garments to each; gave two valuable ear ornaments to buy grain during a famine; distributed alms to priests of both sexes from the four quarters of the world without omission; on five different occasions conferred the whole sovereignty of the island on the clergy for seven days each time; gave 7000 lamps lit with clarified butter and white wicks in twelve different places; maintained eighteen hospitals with doctors and medicines for each; distributed in forty-four places rice, sugar, and honey; supplied all the temples in Lanka with lamp-oil for eight days each month; and caused religious discourses to be given in the wiharas, endowing the preachers with butter and cloth."[1]

Domestic slavery appears to have existed from the earliest times, also "Raja karia" or forced labour, for a number of days in each year, exacted by the "kings to meet the requirements of public works. The King Dutugiamunu, unwilling to harass his subjects too much, is represented as having employed paid labour in erecting his great dagoba, and some other sovereigns followed his example, an innovation much praised by the chronicles. 'Raja karia' seems to have been chiefly used on works connected with irrigation, the population being summoned to the task by beat of drum."[2]

The revenue was derived from taxes on land paid in kind, and often remitted by the kings in consequence of their oppressive nature. (*Vide* ch. xxii.)

Previous to the introduction of Buddhism, and even after, notwithstanding the prohibitions not to take the lives of animals, many kings indulged in the chase, hunting the elk and boar with bow and arrow, dogs being trained for the sport."[3]

Army and Navy.—The Buddhist rulers of Ceylon never appear to have had any regular native army. Many of the early kings hired Malabars to defend them, and these mercenaries were often employed by all parties in their civil wars.

The lowland Siṅhalese are so effeminate no inducement

[1] Mahaw. p. 195. [2] *Idem*, pp. 149—201. [3] Page 166.

would make them fight, the Portuguese and Dutch having both failed on this point. (*Vide* ch. xix.). Marco Polo, probably referring to them and the rulers of the northern parts, says, "the natives were poor, cowardly creatures, and when they wanted soldiers the kings employed Saracens." According to the chronicles Wijayo Báhu (A.D. 1071), "for the preservation of Lanka, placed trustworthy chiefs at the head of paid troops round the coasts."[1]

In case of an invasion the more warlike Kandyans rose *en masse* when called upon by their chiefs through the influence of the feudal system, but they were an undisciplined rabble, only useful in harassing an enemy by interrupting his communications and waylaying outposts. Their mode of warfare is described in ch. xiii.

The "Mahawanso" (ch. xxiii.144) gives the manner of raising levees: "The king issued an order to ten warriors (query chiefs) to enlist ten men each, each of this hundred raised ten more, and so on until 11,110 were enrolled." Four descriptions of troops are mentioned in the chronicles, "elephants, cavalry, chariots of war, and infantry."[2] The mention of cavalry and chariots in a country devoid of roads (*Vide* ch. xiii.) seems like a romance of the chronicles; as war chariots, if at all like those described by the classical writers, could only act in an open level country. However, it is not improbable that in ancient times there were some sort of practicable roads in the then densely-populated northern districts, which have been since so overgrown by the luxuriant jungle no traces of them remain, as the "Mahawanso" speaks in several places of wheeled carriages at a very early date, and of merchants with many carts laden with goods proceeding to the Malaya district (p. 167); yet the frequent allusions to the clearing of roads through the jungles on the approach of distinguished persons show there was some difficulty in the communications. A doubtful passage in the "Mahawanso" (viii. 63) seems to imply that horses were guided by a rope passed through a hole in their nostrils, as it represents a king making a hole in his mare's nose with

[1] Mahaw., ch. lix., append. [2] *Idem*, p. 155; Rajavali, p. 208.

his sword in order to secure her with a rope. "The five weapons of war" are often alluded to in the annals,[1] but only four particularly named—swords, shields made of chank shell, javelins, and bows and arrows.[2] Wijayo is represented as securing the yakkaheni kuweni by the throat with a "naracha na ring," rendered by Turnour, in the glossary index, as a rope with a noose running in a metal ring,[3] which would be something similar to the South American lasso; and the employment of a weapon supposed to have originated in Spain would be a curious coincidence, but there is no allusion to it elsewhere in the chronicle. Bows and arrows seem to have been the chief weapon until the arrival of the Portuguese. (*Vide* ch. xiii.). The Rajaratnacari (p. 101) says "the Malabars used arrows poisoned with the venom of snakes."

Fortified towns with ramparts, wet ditches, and iron gates are mentioned 163 B.C. Thorny creepers, named dadambo, were used as palisades; and lumps of heated iron, molten lead and iron poured on an enemy's elephants employed to batter down walls. The animals are described as being covered with buffalo hides and copper plates to protect them from the missiles.[4] The "Rajavali" (p. 214) speaks of triple ditches, gates eighteen cubits high, and walls covered with brass plates; however, in all probability their strong places were only protected by mud or cabook ramparts. There are few remains of ancient fortifications to be found in the island at present, except the hill of Segiri and an antique stronghold at Wijita near Anuradhapura. Those at Cotta and Sitawacca were destroyed by the Portuguese.

Navy.—The genius of the Siṅhalese is so essentially non-seafaring that it is impossible to suppose they ever had a native fleet; the few notices of shipping which occur in the annals refer to Indian vessels conveying Buddhist missions and princes to and from the island. Ninety-nine dhoneys are stated in the "Rajavali" (p. 228) to have been built for a religious ceremony. Prakrama I. had a fleet commanded by a Malabar, and most

[1] Mahaw. ch. vii. 48,143.
[2] Rajavali, p. 217.
[3] Mahaw. vii. 48, 18.
[4] *Idem*, pp. 154, 214.

probably the sailors and ships were of the same nation. Some Chinese work quoted by Sir E. Tennent says, "thirty ships were sent (A.D. 607) by the king of Ceylon to meet an embassy from China" (i. 441), and these also must have been foreigners. Unlike the Siṉhalese, the Hindus and several other races of the peninsula appear to have been anciently a seafaring people, more so than is generally supposed; and the seas and coasts were infested with pirates (*Vide* ch. xii.); but few Indian rulers appear to have possessed a fleet for war as in Europe, and there is a great absence of accounts of naval engagements until the arrival of the Portuguese. As far back as the tenth century Socotra was a noted haunt of pirates. Mas'udi says it was much frequented by Indian corsairs called "Bawarij," who chased Arabian ships bound for India and China.[1] Ibn Batuta also describes some of their proceedings, and Marco Polo says "the people of Guzerat were the most desperate pirates in existence."

Indian vessels, generally speaking, are quite unsuited for any warlike purpose. There is no trace to be met with of the ancient beaked galley propelled by oars for battering the sides of an enemy, similar to those used by the Romans and other nations in the Mediterranean before the invention of gunpowder. Indian naval engagements must have been hand to hand engagements, between the crews of sailing vessels, by boarding each other: even to the present day the pirates of the Archipelago rely chiefly on overpowering an enemy by a crowd of boarders.

Siṉhalese Chronicles.—There are several very ancient and extraordinary documents in Ceylon recording the events of Siṉhalese history, written with a style on palm leaves which have been religiously preserved in the Wihares and other places by the Buddhist priests for ages. The chief of these venerable documents is the "Mahawanso," or chronicle of Siṉhalese kings, written in Pali verse, commencing ostensibly from the year 543 B.C., and continued to A.D. 1758, having been compiled by the orders of successive kings from original documents, and

[1] Yule's Polo, ii. 328.

is almost unique of its kind, no country possessing anything equal to it, except the native annals in China, and a somewhat similar Sanskrit chronicle in Kashmir, called the "Raja Tarangini," which has been translated into French by M. Troyer.

Sir A. Johnson was the first person who took an interest in the translation of these annals during his residence in Ceylon, having some copies translated by the government interpreters. In 1833 they were edited and published as the "Sacred and Historical Books of Ceylon," by Mr. Upham with Sir A. Johnson's approval, having been previously revised by the Rev. Mr. Fox, a missionary in the island. These volumes contain part of the "Mahawanso," the "Rajavali," and the "Raja-ratnacari"—the latter was written by a priest, Abja-raja-Pinrana, composed from ancient MS. containing a history of Buddhism, abridged from the "Mahawanso" to the time of the Portuguese. "Rajavali" is the work of different hands compiled from local historians, and contains historical details down to the expulsion of the Portuguese. Mr. Turnour, in his introduction, points out that they have been very erroneously rendered in many places; and the Buddhist priests who collected them for Sir A. Johnson imposed on him MSS. that were not original. Their defective translation was also noticed by Burnouf. A barrier to anything like an accurate or comprehensible translation of the Pali annals existed until 1827, when Mr. Turnour (Ceylon Civil Service) obtained from Galle, a Buddhist priest, an original copy of a commentary on the "Mahawanso." "In consequence of the metrical nature of the chronicles they are very obscure, as Pali grammar admits of an extensive license of permutation and elision of letters for the sake of euphony To enable the reader to overcome these difficulties, the authors of Pali works of any note, composed in verse, accompanied them with a commentary explanatory of abstruse passages;" but these essential documents, although known to exist, were not previously to be found. "Mr. Turnour had never met a native who had read through their historical works, or who had till lately seen a commentary, the study of the Pali being exclusively confined to the priesthood."

The "Tika," or commentary, obtained by Mr. Turnour,

comprised the period from the commencement of the annals, 543 B.C., to A.D. 310, the most interesting of the whole chronicles, compiled by Mahanamo between the years A.D. 459 to A.D. 477, from annals in the vernacular then extant. There being no Pali dictionary when Mr. Turnour commenced his work, great difficulties were experienced in the translation, which was effected principally from colloquial Siṉhalese with the assistance of Buddhist priests. The first twenty chapters were published at Cotta in 1836, accompanied by an epitome of Siṉhalese history compiled from various native sources; and in 1837 he published another edition containing thirty-eight chapters—the whole of Mahanamo's version.

D'Alwis states no "Tika" has yet been found for the remaining sixty-two chapters of the chronicles, which are still untranslated and in a very confused state.[1] Sir E. Tennent gives a few quotations from some MS. portions found among Mr. Turnour's papers. The term "Mahawanso," or more properly "Mahantaman-wanso," which means literally "genealogy of mighty men," applies, strictly speaking, only to the first part, from 543 B.C. to A.D. 310, which records the events of the great dynasty ending with Maha-Sen, that which followed being called the "sulu-wanse." Besides the works mentioned, there is the "Dipawanso," an older version than the "Mahawanso," being quoted by Mahanamo; some portions were translated by Turnour in the "Journal of the Asiatic Society of Bengal," and others—recently by D'Alwis in his catalogue of native works, (*Vide* ch. xxii); also the "Pujavali," composed A.D. 1267, by Mairoopada; the "Neekaaysangraha," by D. Jaya-Bahu, A.D. 1347; and the account of the embassy to Siam, 1739—all written in Siṉhalese.

Turnour remarks in his introduction: "It was generally supposed by writers on Ceylon that the natives had no record of events or genuine history, their statements being only legendary tales and romances." This was the opinion of the Portuguese and Dutch, as recorded in the pages of De Barros and Valentyn, being chiefly dependent for their accounts of

[1] Catalogue of Works in Ceylon, p. 113 (1870).

Siṇhalese history on information obtained from the Buddhist priests, the custodians of the chronicles, who appear to have been ignorant of their contents, or to have misled intentionally, as the list of kings given by Valentyn shows. We are, therefore, entirely indebted to Turnour's translation for a great amount of light and certainty on early Siṇhalese history, with valuable references to that of India from 603 to 307 B.C., and it has materially aided in correcting the extravagant statements of the Brahmins.[1] The "Mahawanso," however, contains numerous and absurd fables; the truth being overlaid with the usual amount of fiction inseparable from all oriental histories: it is also a subject open to doubt if Mahanamo, who compiled the chronicle up to his time, faithfully transcribed the previous documents, recording events some of which may have been eight hundred years older than himself, and it has been shown that he antedated the time of Wijayo's landing more than sixty years. The chronicles take very little notice of foreign affairs, or anything that had no reference to Buddhism, being chiefly recitals of ecclesiastical doings, descriptions of temples, and laudations of pious monarchs like Asoka, who, with all the zeal of a convert, forwarded their views, although he had one hundred brothers put to death to clear his way to the throne, and does not fail to denounce those who neglected to promote Buddhism. Gold, silver, and jewels abound in fabulous quantities, and many of the recitals might take a place in the "Arabian Nights."

About the commencement of the present century several learned men in India were engaged in trying to verify Indian Chronology, shrewdly suspected of being falsified by the Brahmins to suit their purposes and confound their rivals the Buddhists. Sir W. Jones first discovered that Chandragupta of the Hindus, who reigned, according to the Puránas, 1502 B.C., was identical with the Sandracottus of Megasthenes, B.C. 315.[2]

[1] M. Troyer, the translator of the "Kashmir Chronicle," considers the Mahawanso "un des meilleurs ouvrages que nous ayons en ce genre Rajatarangini." ii. 408.

[2] J. Fergusson, F.R.S., in a review of Indian Chronology, J. R. A. S. 1869, p. 124, thinks it more probably B.C. 325.

In 1836, when Turnour published his "Mahawanso," the mention in it of Asoka and Chandragupta, his grandfather, enabled Prinsep to identify Asoka as the monarch named Piyadasi (the beloved of the gods), in the "Rock and Lat" inscriptions of Girnar, Delhi, and elsewhere. This important discovery, made in 1837, owing to the indefatigable perseverance and skill of Prinsep in Oriental languages, at once became a stand point in Indian chronology, and fixed with tolerable certainty an important epoch in its history—the rise of Buddhism about 250 B.C.

The principal rock inscriptions which contain the fourteen edicts attributed to Asoka, were first discovered at Girnar in Guzerat; subsequently a nearly similar inscription was found on the opposite coast of India at Dhauli in Cuttack Orissa; the twelfth edict is however wanting in the Dhauli series. In 1840 Captain Burt discovered at Byrath near Bhabra, between Delhi and Djaypur, another inscription on a block of granite, where the names of Bhagavat Buddha, and Piyadasi occur.[1] Inscriptions resembling those at Girnar, where the names of Antiochus, Ptolemy, Alexander, &c., are also sculptured,[2] have since been discovered at Kapur-di-giri, Peshawar, and others at Pursatpur near Raskhulia river in Gangam, and at Khalsi on the Jumna. There are also five inscriptions on columns at Allahabad, Mattiah, Bakra, and Delhi, known as the "Feroz shah Lat," having been brought from its original position in the neighbourhood by that monarch in 1356 A.D., and set up in the city of Delhi. The purport of all the inscriptions is the same, and they appear to have been executed by command of a prince styling himself Devanampiya Piyadasi, in a kind of Pali or Magadha language.[3] Piyadasi is generally admitted to be Asoka, the great Emperor of Northern India, although there is some doubt on the subject, the identity resting on a solitary passage in the "Dipawanso" brought from Siam to Ceylon, inserted in Turnour's "Mahawanso," which states that Piyadasi, or Asoka, the grandson of Chandragupta, was inaugurated two hundred and eighteen years after Buddha.[4]

[1] J. A. S. Beng. ix. 616. [2] J. A. S. Beng. viii. 307; Bombay branch, 1860.
[3] J. A. S. Beng. 1855, p. 390. [4] J. R. A. S. v. p. 20; D'Alwis, Cata. p. 153.

Prinsep's translations of the Girnar and Lat inscriptions, as given in the Journal of the Asiatic Society of Bengal, 1838,[1] have been revised and corrected by Burnouf, in his "Lotus de la Bonne Loi," and Professor Wilson,[2] who throws considerable doubt on the alleged identity of the two sovereigns, while he admits the Piyadasi of the Byrath inscription was a Buddhist. It is rather singular that the name of Asoka does not occur on the inscriptions, while the term Piyadasi, which also means "good-looking," &c., has been given to other Gupta rajas of India, having been found in the Burabur caves applied to Asoka's grandson Dusarat (J. A. S. Beng. 1847). This digression on the inscriptions of India is given here in consequence of their intimate connection with Buddhism, the religion of Ceylon, and the controversies on the subject described in chapters xxii and xxiii. A detailed account of all the inscriptions of India, by Colonel Sykes, will be found in the Journal of the Royal Asiatic Society, vol. vi.

Uninteresting nature of Sinhalese history.—There are very few incidents of Sinhalese history worth recording. Nothing can be more dreary and uninteresting than the domestic annals of the island, as related in the native chronicles, presenting a monotonous succession of plots and crimes; more than twenty-six kings having met an untimely end, children murdering parents, wives husbands, husbands wives and children, to clear their way to the blood-stained throne,—fourteen sovereigns were murdered or poisoned between the years A.D. 523 and 648, a period of little more than one hundred years, giving only an average reign of eight years to each. Pandukábhaya, who reigned 437 B.C., put to death nine of his maternal uncles. "Not more than two-thirds of the whole Sinhalese kings retained their regal authority to their decease, or reached a funeral pile without a violent death."[3] Except the instances in which a reign was distinguished by some invasion of the Malabars, there is not anything more interesting to relate than a vile conspiracy and murder which effected a change of

[1] Vol. vi. 472; vii. 159, 566. [2] J. R. A. S. xii. 243; xvi. 357.
[3] Forbes' Ceylon, i. 80.

sovereign; and there is hardly a king of whom anything more can be said but that he built a dagoba, a wihara, or made a tank. Twenty-two sovereigns were put to death by their successors, any aspirant to the throne usually obtaining the acquiescence of the people to his usurpation as soon as assassination had put him in possession of power.[1]

Queen Anulá poisoned her husband, the king, to raise her paramour, a gate-porter of the palace, to the throne; and four other husbands in succession met the same fate, among them being a carpenter, a carrier of fire-wood, and a Brahmin. She was herself killed by the son of her first husband, who succeeded her.

The precepts of Buddha, not to take life even of the most minute insect, and so often enforced by kings in their edicts, appear to have been little attended to as far as their own lives were concerned. King Upatissa, (A.D. 368,) in the midst of a solemn religious ceremony, having observed some ants drowning in a watercourse, he saved them with a peacock's tail, sweeping them on to the bank with the feather: so says the "Mahawanso,"[2] who relates the pious act; however, this king was consistent, for he did not murder anybody, neither was he murdered himself. A fabulous and romantic story is told of Sanghabodhi, a fugitive king, (upon whose head a price was set by the usurper,) who is represented as severing his own head from his body, and presenting it to a peasant in order that he might obtain the reward, in return for his hospitality in giving shelter to the fugitive. His queen, wandering through the jungle in search of her husband, died of fatigue. Their bodies were buried together, and a monument erected over them at Attanagalla, twenty-eight miles from Colombo, which

[1] Sir E. Tennent says, Valentyn found the accounts of native princes collected by him equally uninteresting, and for this reason omitted in his list all the kings between the fifth and fifteenth centuries of our era. This is a mistake: Valentyn's list begins A.D. 106 and ends A.D. 1707, containing the names of ninety-eight kings, but the dates do not at all correspond with those in Turnour. Valentyn makes the date of "Pands-Vassia," (Panduwassa,) A.D. 159, instead of B.C. 504, and Dewananpiatissa A.D. 339, instead of B.C. 307. "Deveni-petisse maha-raja Hy Stigte Pagoden en outsing de leere Budhem en 8 Vrumde prinzen," v. 5, p. 83. Valentyn's list was probably the first ever made.

[2] Page 249.

is said to be still in existence. The remains of the rice ate by the king along with the peasant, on the occasion, sprang up afterwards, and continues to give an annual crop ever since, being shown by the priests at the present day growing on the spot. Very high-flown language runs through all the chronicles. A collection of ragamuffins, armed with bows and pikes, lying in wait in a jungle for an unsuspecting enemy whom they were afraid to face openly, is magnified into "an innumerable army of invincible warriors."

Pieces of cloth seven miles long were laid down for pilgrims in processions to walk on.[1] The Buddhist priests, who appear to have formed a large part of the population, being dependent on public charity and royal bounties, the regal grants to them are exaggerated beyond all bounds in order to stimulate others: eight thousand rice-fields[2] were bestowed on them by one king (A.D. 62), another gave 6,480,320[3] flowers to decorate the temple of the Tooth. Prakrama-báhu (A.D. 1153) is represented as having himself and his queens weighed every year, and giving five times the total weight in gold to the poor.[4] *Vide* ch. xxii.

Siṇhalese history being of the nature described, it is only necessary to mention a few of the chief incidents; and these relate to their intercourse with India, China, and other places. Turnour's Epitome, a work of great labour and patience, along with his translations, forms the chief part of all the histories of the island, very little information having been obtained since, except from some of the recent investigations into Indian history and deciphering of inscriptions on the continent, which tend to show that Ceylon was oftener ruled by Indian princes than the native chronicles have been free to admit.

The cave inscription at Nassik states that a king named Gotamiputra ruled in Guzerat, Deccan, and Lanka, (A.D. 338,) and the Chalakeya Adhirajaas boast so continuously of their conquests of Ceylon, it is probable that from the time of the Guptas, or at least from A.D. 434, the island was more or less

[1] Mahaw. ch. xxxiv. [2] Rajaratnacari, p. 59. *Idem*, p. 136.
[4] Inscription on a tank at Polanarrua: Turnour, Epitome, ii.

a dependency of the Indian Empire.[1] A writer in the "Journal of the Royal Asiatic Society," 1870, thinks the Damilo named Pandu in the "Mahawanso" (p. 254), who landed A.D. 434 from the opposite coast, put Metta-Sena to death, and usurped Lanka, "was no other than Meghavhana, Raja of Kashmir," who is stated in their chronicles to have "invaded Ceylon, encamping with his army near the Mountain of Gems (Adam's Peak), where he received the homage of the king." Some make the date of Meghavhana's reign A.D. 144, and M. Troyer A.D. 24, who says, "En effet Meghavahana marcha le long de la mer occidentale de l'Inde et passa dans l'île de Ceylon, où il reçut les hommages du souverain de ce pays." This would have been a wonderful march indeed; the whole expedition was probably as fabulous as that of Ráma. Sir E. Tennent calls it a pilgrimage. Several other conquests of Ceylon by the Guptas of Kashmir are named.[2]

Some have supposed that Asoka ruled in the island, and that he was identical with Phrates, the Greek king of Parthia,[3] or ancient Persia (B.C. 169), but there seems to be little foundation for either of these surmises. The edict of Asoka in the Girnar inscriptions referred to by Dr. Latham, where this Raja claims jurisdiction over Ceylon, says, "all the conquered territories of the Raja, even unto the ends of the earth, as in Chola, in Pedà, in Keralaputra, and in Tambapanni."[4] This Tambapanni may have meant that part of southern India through which a river of this name runs into the Gulf of Manaar, and probably had no reference to Ceylon. Professor Wilson doubts if it does refer to the island.[5] Prinsep at one time thought the Lats at Delhi and Allahabad were erected by Devenepia-Tissa of Ceylon in commemoration of the conversion of the island.

A Sanskrit inscription at Benares, given in the Asiatic

[1] J. Fergusson, F.R.S., J. R. A. S. iv. 109; also Bombay branch.

[2] Bombay, J. R. A. S. iii. 205.

[3] J. R. A. S. xvi. 273 (1860); Raja Tarangini, L. iii. 70, v. 11, 365, 473.

[4] An account of the Parthian kings by Lassen, will be found in J. A. S. Beng. 1849.

[5] J. R. A. S. xii. 167.

Researches (xv. 456) states that Jayachandra Raja of Kananj (A.D. 1177 to 1186), went on a pilgrimage to Siṅhala, and received from Virabhidra, the king whom he conquered, a beautiful female.

The Siṅhalese, or descendants of the Bengal emigrants, being entirely engrossed in agriculture, paid no attention to the defence of the country. The early kings never possessed more than a nominal authority over the subordinate chiefs, while the throne was continually usurped by daring adventurers at home, or princes from India who invaded the island, and a general chaos frequently prevailed. The destruction of the tanks and the decay of agriculture has been traced to the Malabars, who adopted this effectual method of ruining their enemies. Referring to the Malabar invasions, the Rajavali (p. 256) says "the whole island resembled a house in flames, or darkened by funeral rites." Some of the Malabars were employed to defend the natives against their countrymen, one of whose commanders named Elála, 205 B.C., slew the King Asila, and usurping the throne, ruled, according to the "Mahawanso," with justice for forty years, when he was killed by Dutugaimunu, one of the native princes.

Establishment of Buddhism.—It is admitted by D'Alwis, in his "Sidath Sangara," that everything known about Ceylon previous to the establishment of Buddhism is very dubious and full of absurdity, the real history of the island commencing with that event, which occurred about the middle of the third century B.C.; but, according to the "Mahawanso," B.C. 307, if Chandragupta of the Puránas, Asoka's grandfather, reigned at the time of Alexander or Megasthenes B.C. 323 to 302. There is a discrepancy of about sixty-two years in the chronicle, according to Turnour, in his introduction, who says the landing of Wijayo must have taken place sixty-two years after Buddha's death (543 B.C.); the date assigned in the chronicle being a pious device of the annalists to make the two events coeval, and Ceylon chronology only reliable from B.C. 161.[1] But, in reality, the time when Buddha died is very pro-

[1] There are several articles on the Chronology of Ceylon by Turnour, in the early numbers of the J. A. S. Beng.

blematical, and the real date of the commencement of Asoka's reign is also uncertain, the chief clue being the fact that Chandragupta reigned at the time of Megasthenes. Turnour made it B.C. 247, and Mr. Fergusson, F.R.S., about B.C. 276, and the real date of Wijayo's landing B.C. 487; he also thinks the dates of Ceylon history as adjusted by Turnour for the fourth century A.D. ten or fifteen years too early.[1] Thus, in dealing with the dates in the "Mahawanso," it is necessary to recollect they are antedated about sixty years.

Buddha's visit to Ceylon is doubtless a pure myth: however, his doctrines were not established in the island until three centuries after his death. Wijayo and his successors being Brahmins, they lent no aid in promulgating them; but about the twelfth or thirteenth year of the reign of Asoka or Dharmasoka, himself a convert to Buddhism, Raja Tissa of Ceylon was converted by the preaching of Mahindo, son of Asoka—a mission predicted by Buddha at the foot of the Bo tree, and probably resulting from the great Buddhist synod held at Patna, 241 B.C., when missionaries were dispatched to Pegu and some other countries to convert them.[2] Mahindo arrived, according to the chronicles, in a miraculous manner[3] through the air for the conversion of Lanka, and Buddhism was made the religion of the State amid great ceremonies; some of Buddha's bones were obtained from India, and the work consummated the same year by the planting, at Anuradhapura, of a branch of the sacred "Bo tree" under which he reclined at Uruwela, the modern Gayá in Behar. All these events are recorded in the "Mahawanso" with more than usual amount of grandiloquous exaggeration.[4] The royal convert Tissa was proclaimed the beloved of the saints "Devanampiya-Tissa," a golden plough was used by him to mark the ground where dagobas and sacred edifices were erected. Hosts of holy men came from India to witness the ceremonies; even nature and the earth showed their rejoicings at the events

[1] J. R. A. S. 1870.

[2] *Vide* ch. xxii.

[3] "On the full moon day of Jittho, the supernaturally gifted Thêro Mahindo rose aloft into the air, and instantaneously alighted on the hill of Mihintala." Mahaw. ch. xiii. 77—84.

[4] Ch. xiii—xviii. 113.

by incredible signs and wonders, miracles abounding. Mahindo's sister, Sanghamitta, joined him in the work of the conversion of Lanka, but she did not arrive in the island in the same miraculous manner, coming along with the branch of the "Bo tree." They both died in Ceylon, having attained the highest state of sanctity, in the eighth and ninth years of the reign of Uttiya (Mahaw. xx. 125).

When the deputation from Ceylon arrived in India asking for a part of the Bo tree, the King Dharmasoka and the priests wishing to avoid any sacrilegious cutting of its branches, thought of the inspired device of marking one of them with a vermilion pencil, upon which the branch came off, and planted itself in a golden vase filled with perfumed earth, which was placed on the ground ready for it. The branch thus happily severed from the parent stem was conveyed with great pomp, in charge of Sanghamitta, to Lanka.

The apparently venerable tree now growing at Anuradhapura, surrounded by ruins, is stated to be the same that was then planted, which would make it about 2124 years old. Evidence of the existence of a tree in the same position at Anuradhapura in the fourth century A.D. is given by Fa Hian, who says, "the former kings of Ceylon sent envoys to the kingdom of the middle (Magadha) to obtain some *seeds* of the tree of Buddha, which they planted near his temple; when the tree was sixty-one yards high, it inclined to the south-east, and props were placed under the branches to support it."[1] Although there is no doubt that its age is very great, there is reason to suppose it is not the original tree.[2] Fa Hian speaks as if it was a banyan (*Ficus indica*), "letting down a branch which took root in the earth," while the tree now growing at Anuradhapura is a Bo tree (*Ficus religiosa*), a variety that has no aërial roots from the branches: then the *Ficus*, from the peculiar nature of its growth, admits of being easily renovated. Rajendralála Mittra says, the original tree at Boodh-Gayá has disappeared long ago, the one there now not being 200 years old. Buchanan estimated it one hundred, when he saw it in 1811.

[1] Julien's trans.; Rev. S. Beal makes it 220 feet high, p. 152.

[2] Sir E. Tennent says its age is a matter of record.

The priests place a seedling in a hollow of the trunk when it begins to decay, and thus renovate the tree from time to time.[1] Fa Hian's description may possibly refer to some trick of this sort.

Boodh-Gayá is supposed to be the spot where Sakya received his mission, and has long been a place of resort for Indian devotees ; but there are no Buddhists there now.

Sir E. Tennent says, the Bo tree was selected by the Buddhists as an emblem of a new and peculiar worship, differing from the banyan near Brahmin temples (i. 342) ; however this may be, the peepul, as it is called in India, has been always regarded with veneration by the Hindus, as Vishnu is fabled to have been born under one (the tree at Gayá is dedicated to him), and it is often planted near Hindu temples.

Asoka's second wife, described as "a malicious vain creature, who thought of nothing but her personal charms," tried to destroy the Bo tree at Uruwela with the poison of a toad, because the Great Raja lavished all his attentions on the holy tree instead of his consort; but her impious attempt failed. Various trees have been connected with the different Buddhas, —one received his mission under a banyan, another the champac, and the next Buddha is to patronise the iron-wood tree (*Mesua ferrea*).

The great palladium of Buddhism, "the tooth," the possession of which has rendered Ceylon so famous among the followers of Sakya throughout the East, did not arrive in the island until 310 A.D., nearly 600 years after his faith was established there ; the war of extermination the Brahmins in India were carrying on against Guhasiwo, the possessor of the relic, rendering his dominions no longer a safe place for it (*vide* ch. xxiii.). Fa Hian, who arrived in Ceylon on a pilgrimage at the end of the same century, gives a description of the annual ceremonies connected with it.

The Wytulian Schism.—During the reign of Waiwahariatissa, A.D. 209, a great schism occurred among the Buddhists of Ceylon, caused by one Wytuliya, who, we are told, put forth false doctrines; but after a solemn inquiry his books were

[1] J. A. S. Beng. 1864, p. 175. *Vide* ch. xxxv.

burnt and the schism summarily suppressed for a time. The Buddhists, although tolerant to all beliefs outside themselves, and supremely indifferent to the arguments or assaults of other systems of religion, are said to have always been violently opposed to schism, which is immediately put down with a strong hand.

Toleration extended to other sects, would seem to have been inculcated by Buddha himself, and is found among the edicts of Asoka at Girnar, which inculcate, according to the revised versions of Professor Wilson and Burnouf,[1] the duty of leaving other men's faith alone, all religions tending more or less to the improvement of mankind. In Burmah great toleration is shown towards people professing other religions, but any secession from Buddhism is punished with death.[2] A great deal of the persecuting spirit has been shown in China and Japan, which are Buddhist countries, but it may have proceeded there more from the mandarins and lay authorities than the priests; however, they have never exhibited any intolerance in Ceylon.

The orthodox "Mahawanso" and other native records, unwilling to allude to the schism, throw little light on the nature of the Wytulian doctrine; but it can be gathered from them that it originated with the priests, some of whom were stripped of their yellow robes and branded on the back. The "Rajaratnacani" (p. 61), intimates that Wytuliya was a Brahmin, who had subverted by craft and intrigue the religion of Buddha. The "Mahawanso" says, among a number of priests who were banished to India for complicity in the movement, was one named Sangha-mitta, who was profoundly learned in the arts of demon worship (p. 233)

It has been suggested that "the Dewales and halls for devil-dances so generally accompanying the Vihares"[3] throughout the island, originated with this schism, as the "Mahawanso" represents Maha-Sen destroying Dewales at Anuradhapura; but the chronicle (p. 67) speaks of halls being built near temples for the followers of Brahma long before that period.

[1] J. A. S. xii., and Lotus de la Bonne Loi, Append.
[2] Prof. Wilson, J. R. A. S., xvi. 261.
[3] Tennent, i. 380; Turnour, Epitome.

Professor Wilson, in his "History of the Pandyan Kings," mentions that a Buddhist heresy which occurred there some time previous to the sixth century is stated to have been introduced from Ceylon, and the banished priests sent back to the isle, which probably refers to some subsequent revival of the doctrine, which broke out again on several occasions, having been adopted by Maha-Sen (275 A.D.), who, instigated by his chief minister Soohuna and Sangha-Mitta, who appears to have returned from India in disguise, tried to starve the orthodox priests into submission by prohibiting their collecting alms, but they fled to Rohuna; he also destroyed several hundred Viharas and pulled down the brazen monastery at Anuradhapura, using the materials for building a new temple where Buddha was worshipped according to the reformed system; but becoming penitent after a time, the orthodox priests were recalled and Sangha-Mitta beheaded, the minister being trampled to death by the enraged populace, who appear to have been opposed to the movement. It was possibly on this occasion that the Dewales were destroyed, as related in the "Mahawanso." This schism again broke out in 534 A.D., which seems to have been the last of it. But another, called "the schism of the blue robe," occurred in 858 A.D., and one was introduced from Burmah in 1802.

Prakrama Báhu I. (1153 A.D.), according to the chronicles, was one of the most renowned of Siṉhálese sovereigns, first successfully expelling the Malabar invaders, and then sending an expedition to the archipelago to avenge the insults of the kings of Cambodia, who intercepted ships between Ceylon and the continent; he next turned his arms against the Pandian kings in consequence of their assisting the Malabar invaders; having conquered them he founded a city, where he coined money, and then returned in triumph to Ceylon.[1]

Sir E. Tennent quotes a "Catalogue of kings of Pandya," by Professor Wilson, in which the name of Prakrama-Bághu occurs sixty-fifth on the list of kings of that state,[2] as a proof of the truth of the relation in the "Mahawanso;" but there

[1] Mahaw. ch. lxxvi.

[2] J. R. A. S. iii.; Asiat. J., iii. 201–7; Turnour's Epitome.

are reasons why it should be taken in quite an opposite sense, and that more probably this king of Pandya ruled in Ceylon, and for some reason the "Mahawanso" adopted him as one of their legitimate rulers.

The island had been for nearly a century in the almost entire possession of the Malabars, and complete anarchy is stated to have long prevailed over the whole; this being the case, it is not probable they would have been in a position to invade any place.

Several Chola or Pandian kings have boasted in their edicts of the supremacy they exercised over Ceylon, and copper plates have been found where they are recorded.

Although the invaders are generally called Malabars, they appear to have come from several parts of the continent, including Kalinga, or the northern Circars, Sollee, now Tanjore, and Mysore, also Pandya, or Madura, Southern India. Sir E. Tennent, in a note (i. 397), alluding to the Hebrew MS. in the possession of the Jews of Cochin, says: "There is evidence of the conscious superiority of the Malabar over the north of Ceylon in the fourth century in this document, which states that Sri Perumal ruled from Goa to Colombo." It has been shown in Chapter X. that this Colombo had no reference to Ceylon.

The expedition to Cambodia is stated to have sailed in the year 1169 A.D., returning in triumph after having chastised the sovereign. In the "Journal of the Asiatic Society of Bengal," vol. vi., there is an account of a Pali inscription discovered at Singapoor, which states it was founded by a king of Ceylon in 1200 A.D.; hence it is not improbable that this town owes its name to the expedition; there is only a difference of about thirty years in the date. The Siṅhalese chronicles are quite silent on the point, and give very scanty information about the expedition. Colonel Yule, in his notes to "Marco Polo," quotes a Malay chronicle, which says: "Singapore was founded by Iskander Shah, a Mahometan" (1252 A.D.).

A fabulous story is narrated of the reign of one of the kings at this period, it is not clear which, identical with the Irish legend which Moore has made the subject of one of his melodies:

"Rich and rare were the gems she wore."—Such was the peace and security enjoyed in Ceylon even in the wildest parts during his reign, "a woman might traverse the isle with a jewel and not be asked what it was." Turnour, in his description of the four inscriptions on the rock at Dambul and Polanarrua, which contain this story, says, "that they are commemorative of the reigns of Kirti Nissanga and two other princes of Kalinga, who ruled in Ceylon between 1187 A.D. and 1200 A.D., and is of opinion they were executed rather more than half a century afterwards in the time of Prakrama Báhu III.—the state of Ceylon during the short reign of Kirti Nissanga was not such as to justify the boastful assertion,[1] which is also related of England during the reign of Alfred, "that a golden bracelet hung up near a highway would remain untouched."

At the death of Prakrama I. another long period of anarchy and several Indian rulers followed. Kirti Nissanga, a prince of Kalinga, was king in 1187 A.D., and Pandi Prakrama II., 1211 A.D., who is said to have conquered the whole island. The Malabars, from their stronghold at Jaffna, invaded and overran the country with impunity. Polanarrua, Anuradhapura, and other old capitals in the low lands were abandoned, and more secure positions sought in the mountains; Siri Wardhnapoora, the modern Kandy, Yapalíu in the Seven Corles, Kurnagalla and Gampola, were successively chosen for the royal residence, eventually settling at Cotta near Colombo, where it remained until some time after the arrival of the Portuguese.

The Malabars, in one of their forays under Chakawati, general of Kulasaikera, a Pandian prince, carried off the "Dalada" from the Yapahu to India (1303), where it remained until it was recovered a few years after by negociation.[2] This Kulasaikera was probably one of the rulers of Mabar, called the Dewar Kelesa by Wassaf, who says he was slain in 1310 A.D., after a reign of forty years.[3]

Malay invasion of Ceylon.—There were two piratical inva-

[1] Tennent, Ceylon, i. 409; Turnour, Epitome, p. 83. *Vide* also article by Mr. Knighton, in Jour. A. S. of Bengal, 1847, p. 344.

[2] Turnour, Epitome, p. 47; J. A. S. Beng. vi. 867.

[3] Elliott, Hist. Ind.

sions from the archipelago during the reign of Prakrama Báhu III., (1267 A.D.,) under the leadership of a chief called Chandra Banu, who is conjectured to have been the "Sendeman" of Marco Polo, who visited the island at the end of the same century; the Tamils joined the invaders in the first incursion, which took place according to M. Pauthier in 1277 A.D.: he calls them Javaku, or Javanese (Polo, p. 585).

Chinese supremacy in the Island.—Sir E. Tennent has produced a number of Chinese authorities which give a detailed account of this event, also mentioned in the Ceylon chronicles; but in Upham's version of the "Rajavali" the invader is incorrectly described as having been a Malabar king, who carried off a number of persons along with the king of Ceylon to China.

Sir E. Tennent says, his narrative is chiefly taken from the "Ta-tsing-yi-tung," a topographical account of the Manchow Empire, written in the seventeenth century. His attention was called to this work, which is in the British Museum, by Mr. Meadows, the Chinese scholar, author of "The Chinese and their Rebellions;" it is also found in the "Ming-she." De Couto alludes to this invasion, but has confused the names, dates, and circumstances. (Dec. v. l. 1.)

According to the Chinese accounts, Wijaya Báhu VI., who reigned from 1398 to 1410 A.D., was a Sollean and a Brahmin, who tyrannised over his subjects and plundered vessels on his coasts; he provoked a quarrel with China by insulting and pillaging a Chinese mission who came to offer incense to the "Tooth," its members escaping with difficulty The emperor Ching-tso, indignant at this outrage and anxious to re-establish Chinese supremacy in the Malasia and India at the same time, sent Ching-Ho, one of his generals, with a fleet of sixty-two junks, having on board an army and rich presents of silks and gold; the expedition stopped at Cochin-China, Sumatra, Java, and Siam, using force when required to exact submission.

The fleet did not reach Ceylon until 1408 A.D., having returned to China from the archipelago in 1407 and departed a second time. The king, Wijayo-Báhu, called A-lee-koo-nae-

wurh by the Chinese, tried to decoy some of the invaders when they arrived on the coast into the interior in order to destroy them in detail, a favourite Kandyan mode of warfare; but Ching-Ho was too cunning for them, and succeeded by a *coup-de-main* in capturing the king and his family at Gampola, carrying them off to China along with a quantity of spoil, amongst which the Chinese say was the famous Tooth of Buddha: the whole of the booty taken on this occasion was exhibited for many years after at Nankin.

One of the commentaries on the Si-ya-ki of Hwen Thsang, translated by M. Julien, an interpolation in the original text of the fifteenth century, says: "the Tooth of Buddha was among the spoil carried to China;" and it is not improbable, being then at Gampola, which was the seat of government when the invasion occurred.

In 1411 the captives were liberated and returned by the Chinese to Ceylon, one of the captured chiefs, named Scay-pa-nae-na, being made the Emperor's viceroy on condition of paying a tribute to China, which was exacted until 1459, when the last was paid; the Chinese Emperors also assumed a right to interfere in the island. Ching-Ho issued a proclamation for the pacification of Ceylon in 1430 A.D., and at a later period the Emperor issued an edict for the government of the island.[1]

The viceroy selected by the Emperor of China changed his name to Pu-la-ko-ma Ba-zae La-cha (Prakrama Báhu VI.), the King, in Mr. Turnour's list, 1410 A.D., but the native annals are quite silent as to his being a nominee or viceroy of the Chinese Emperor. Are we implicitly to believe these Chinese accounts? is the date assigned quite accurate, or do they not rather refer to the similar expeditions sent to Southern India by Kubali Khan a century earlier, when Ceylon is stated to have become a tributary to China?—(*Vide* ch. xii.)

[1] Tennent, Ceylon, i. 625.

LIST OF CEYLON KINGS taken from Mr. Turnour's Epitome, with the dates of their accession as given by him. He says, "There are few dates given in the Chronicles, the period of each sovereign's accession being only guessed at by adding the number of years of each reign to the preceding." Most of the Kings have more than one name, many are omitted for the sake of brevity; also a number of rival Kings, the chief Kings only being inserted. Mr. Turnour remarks with regard to the names of the kings and places of the island, that Pali names have all some specific signification, every soveriegn being designated by more than one appellation, and it required much patient iuvestigation to identify the ancient names of the iunumerable tanks and other ruius scattered through the isle,—the names of many places are greatly changed—the sound being retaiued in the vernacular, but not the original Pali signification.

	Name.	Capital.	Years. B.C.	Chief Events.
1	Wijaya	Tamana Newera	543	
2	Upatissa	Upatissa Newera	505	Minister of Wijaya; he brought over from India Panduwássa, Wijaya's nephew, and placed him on the throne.
3	Panduwássa	,,	504	During this reign the great inundation occurred in Romanga, situated between the island and the continent.
	Rama Rohuna Diggania Orawili Wijitta			Brothers of Panduwássa's Queen, who divided the island between them, each taking the name of the district allotted him.
4	Abhaya		474	Eldest son of Panduwássa; reigned tranquilly for twenty years, when his nephew disputed the throne.
	Interregnum		454	Wars and commotions.
5	Pandukábhaya	Anuradha-poora	437	Made the tanks Jayawewa and Abhawewa.
6	Mootasewa	,,	367	
7	Devenipia-tissa	,,	306	Sixty-eight rock temples, thirty-two priests' houses, the Maha wihara, several dagobas and the Tissa-wewa tank were made.
	Mahanaga Jatala-tissa Gotabhaya Kalany-tissa Kawan-tissa			Devenipia-tissa's Queen failing in an attempt to poison her brother-in-law Mahanaga, he fled with his sons to the provinces where they ruled independently. Inundation at Kalany.

	Name.	Capital.	Years. B.C.	Chief Events.
8	Uttiya	Anuradha-poora.	267	Fourth son of Mootasiwa.
9	Mahasiwa	,,	257	Brother of Uttiya.
10	Sura-tissa	,,	247	*Idem*, put to death by some Malabar horsemen he hired to defend him, who seized the throne, but they were killed by Asela.
11	Séna and Goottika	,,	236	
12	Asela	,,	215	
13	Elála	,,	205	
14	Dutugaimunu	,,	164	Built Ruwanwella dagoba and the brazen palace.
15	Saidaitessa	,,	137	Brother of preceding king, his son having been excluded for marrying a beauty beneath his rank.
16	Tuhl or Thul-Eathanaka	,,	119	
17	Lamini-tissa I.	,,	119	
18	Kalunna	,,	109	Put to death by his minister, who was in his turn killed by the king's brother.
19	Walagam-Bahu	,,	104	Island invaded by seven Malabars who ravaged the whole, and carried off Buddha's patra.
20	Pulahatta		104	Deposed and put to death in succession, the whole island being in a state of complete anarchy.
	Báyiha		103	
	Panaymárá		100	
	Peliyamárá		98	
	Dathiya		91	
21	Walagam-Báhu	,,	88	Restored; while wandering about the country in disguise, during the occupation of the Malabars. He had the tenets of Buddha reduced to writing, collecting 500 priests together for the purpose; afterwards raising an army he expelled the Malabars and reoccupied his throne; he built the Aloo wihare near Matele in a rocky cavern, and the Abhayagiri dagoba.
22	Mahadili-tissa	,,	76	
23	Chora-Nága	,,	62	An impious prince put to death by his subjects.
24	Kudá-tissa	,,	50	Poisoned by his Queen Anulá.
25	Anulá, (Queen)	,,	47	
26	Makalan-tissa	,,	41	

	Name.	Capital.	Years. B.C.	Chief Events.
27	Batiya-tissa	Anuradha-poora.	19	Prohibited the taking the life of anything, however small, but was put to death himself.
			A.D	
28	Maha-dailiya	,,	9	
29	Adagaimunu	,,	28	Put to death by his brother and successor.
30	Kinihirridalla	,,	30	A cruel and impious prince.
31	Kudá Abhá	,,	33	
32	Sinha Wallí	,,	34	Sister of preceding, put to death by her cousin.
33	Elleuná	,,	38	Miraculously saved from his subjects by the state elephant.
34	Sanda Muhana	,,	44	Son of preceding.
35	Yasso Siloo	,,	52	Put to death by his brother who succeeded him.
36	Subha	,,	60	Deposed and put to death by Whapp.
37	Whapp	,,	66	A long and prosperous reign, sixteen tanks were built.
38	Wanka Násika	,,	110	Island invaded by Solleans.
39	Gaja Báhu	,,	113	Recovered Buddha's cup from Malabars.
40	Maha Lumana	,,	125	
41	Bátiya-tissa	,,	131	Made many tanks.
42	Chula-tissa	,,	155	
43	Kuhuna	,,	173	Son murdered by successor.
44	Kudanáma	,,	183	Nephew deposed by brother-in-law.
45	Kuda Siriná	,,	184	
46	Waiwaharia-tissa	,,	209	Murdered by successor.
47	Abhá sen or tissa	,,	231	
48	Sri Nága	,,	239	
49	Wijaya-indu or Wijaya II.	,,	241	Put to death by his successor.
50	Sanga-tissa I.	,,	242	Placed an adamant on the top of Ruanwella dagoba : he was poisoned.
51	Dahama Sirisanga Sangha Bodhi	,,	246	A great famine and plague occurred in this reign, attributed to a red-eyed demon. To appease him a devil dance was instituted, which is kept up to this day
52	Golu Abhá	,,	248	
53	Makalau Detu-tissa	,,	261	Completed the seven-storied building commenced by his father.
54	Maha Sen	,,	275	Brother of preceding, built

	Name.	Capital.	Years. A.D.	Chief Events.
				the Jata-wana dagoba, and formed the great tank at Mineri by damming up the Kara-ganga, also sixteen smaller tanks, and sent a deputation to Kalinga to ask for the Dalada relic. With him ended the great dynasty, their successors being called "Soolu-wanse" in consequence of the decline of the country's greatness.
55	Kitsiri-Maiwan	Anuradhapoora.	302	Dalada relic arrived from India in the ninth year of this reign.
56	Detu-tissa II.	,,	330	
57	Bujas or Budadassa	,,	339	A great proficient in medicine: he ordered that every ten villages should have a doctor, a devil dancer, a preacher, and an astrologer.
58	Upa-tissa	,,	368	Built a temple at Hattanagal covered with gilt copper tiles.
59	Maha-Namá	,,	410	
60	Sengat or Sotthi Sena	,,	432	Poisoned the day of his accession by a princess who married his successor.
61	Lamini-tissa	,,	432	
62	Mitta Sena	,,	433	Raised to the throne by the minister. Malabars invaded the island and put the king to death.
63	Pándu	,,	434	Malabar usurpers. Native chiefs fled to Rohuna; continual war raging, one of the members of the royal family at last succeeded in expelling the Malabars and recovering the throne.
	Párinda Kuda	,,	439	
	Khudda Parinda	,,	455	
	Dátthiya	,,	455	
	Pittiya	,,	458	
64	Datu-sen or Dáscukelleya	,,	459	Repaired many of the tanks. Put to death by his son and chief minister.
65	Segiri Kasumbu	Segiri Galla	477	He abandoned Anuradhapoora, and removed his treasures to the top of the Segri Rock, which he fortified, cutting steps up the steep sides. He committed suicide on being defeated by his brother.

	Name.	Capital.	Years. A.D.	Chief Events.
66	Moogallana	Anuradha-poora	495	Said to be another brother of preceding, who fled to India, but returning with an army, landed at Colombo, which he fortified, and afterwards defeating his brother reigned in his place.
67	Kumára Das	,,	513	A prince of great learning. A poet named Kalidas having been murdered by a courtezan, whose house the king frequented, he sacrificed himself on the funeral pile of the poet.
68	Kirti Sen	,,	522	Murdered by successor.
69	Maidee Siwu	,,	531	*Idem.*
70	Laimini Upa-tissa III.	,,	531	Died of grief.
71	Ambaherra Salamai-wan	,,	534	
72	Dapulu I., or Datt-hapa Bhodhi	,,	547	Murdered his brother and committed suicide.
73	Daha Magalan or Moogallana II.	,,	547	
74	Kudá Kitsiri Maiwan	,,	567	A minor, put to death by successor.
75	Senewee or Maha-Nága	,,	586	
76	Aggrabodi or Sula Akbo	,,	589	Formed some tanks.
77	Aggrabodi II.	,,	623	Made fourteen tanks.
78	Sanga-tissa	,,	633	Decapitated by his minister.
79	Boona-Moogalana	,,	633	Put to death.
80	Abhaseggaheha	,,	639	
81	Sri Sangabo	,,	648	Driven out of the island by successor.
82	Kaluna Detu-tissa	Dondera	648	Deposed king returned with a Malabar army, when Kaluna committed suicide.
	Sri Sangabo	Anuradha-poora	649	Restored.
83	Dalupeatissa	,,	665	Killed in battle.
84	Pasola Kasamba	,,	677	
85	Dupulo II.	,,	686	
86	Dalupeatissa II.	,,	693	
87	Paisulu Siri Sanga	,,	702	
88	Walpitti Wasidutta	,,	718	Raised to throne by minister.
89	Hununaru-Riandalu	,,	720	
90	Mahalaipanoo Mana-wamma	,,	720	

	Name.	Capital.	Years. A.D.	Chief Events.
91	Kasiyappa III., or Kasambu	Anuradha-poora	726	
92	Aggrabodi III.	Polanarrua	729	Anuradhapoora became neglected, and Polanarrua was henceforth the capital for some time.
93	Aggrabodi IV., or Kudá-Akbo	,,	769	
94	Mihindu I.	,,	795	
95	Dappula	,,	795	
96	Mihindu II.	,,	800	A rightcous prince.
97	Aggrabodi V.	,,	804	Brother, *idem.*
98	Dappula III.	,,	815	
99	Aggrabodi VI.	,,	831	
100	Sena or Mitwella Sen	,,	838	Island invaded by king of Pandya, who sacked the capital, sending all the golden images, jewels, etc. to the continent. He retired on receiving a sum of money. A new schism.
101	Kasiyappa IV.	,,	858	The King of Pandya's son having revolted against his father, a civil war in the Madura district enabled the Sinhalese to invade it and recover the spoil taken from them.
102	Udaya I.	,,	891	
103	Udaya II.	,,	926	
104	Kasiyappa V.	,,	937	
105	Kasiyappa VI.	,,	954	
106	Dappula IV.	,,	964	
107	Dappula V.	,,	964	
108	Udaya III.	,,	974	A tyrannical prince.
109	Sena II.	,,	977	
110	Udaya IV.	,,	986	A Malabar invasion.
111	Sena III.	,,	994	
112	Mihindu III.	,,	997	Repaired edifice on Adam's Peak which the Malabars had destroyed.
113	Sena IV.	,,	1013	Died a victim to ardent spirits.
114	Mihindu IV	Anuradha-pôora	1023	So many Malabars had settled in the island they gained the ascendancy, and making the king a captive, sent him to the Sollu country.
	Interregnum		1059	A Solean viceroy.
	Maha-Iai	Rohana		Subordinate kings reigning in succession; complete anarchy prevailing all
	Wikrama	Kalutotta		
	Jajat Pandi	Rohana		

	Name.	Capital.	Years. A.D.	Chief Events.
	Pandi Prakrama Báhu	Kachara-gama		over the island. At the death of Prakrama, the
	Lokaiswera			minister Lokaiswera seized the throne.
115	Wijaya Báhu I.	Polanarrua	1071	Son of chief minister who expelled the Malabars after a prolonged conflict.
116	Jayabáhu	,,	1126	A disputed succession.
117	Wikramabáhu	,,	1127	
	Manabarana	Rohana	1127	Two subordinate kings
118	Gaja Báhu II.	Polanarrua		reigned in Rohana; one
	Sriwalla	Rohana		of them may have been the prince mentioned by Edrisi as residing at Dondera.
119	Prakrama Báhu I.	Polanarrua	1153	Formed some tanks and many public works.
120	Wijaya Báhu II.	,,	1186	Killed in a dispute about a herd's daughter.
121	Mihindu V.	,,	1187	Also killed.
122	Kirti Nissanga	,,	1187	A prince of Kalinga, built several wihares.
123	Wikrama Báhu II.	,,	1196	Put to death by Malabars.
124	Chondakanga	,,	1196	Eyes put out by his minister, who married widow of Prakrama Báhu I., named
125	Leela Watee, Queen	,,	1197	Leela Watee, who succeeded.
126	Saahasamallaisa	,,	1200	Deposed.
127	Kalayanawate	,,	1202	Sister of Kirti Nissanga the minister.
128	Dharmasoka	,,	1208	A child three months old.
129	Nayayanga	,,	1209	A usurping minister, deposed and killed.
	Leela Watee	,,	1209	Previous queen restored.
130	Lokaiswera	,,	1210	A foreigner.
	Leela Watee	,,	1211	Again restored.
131	Pandi-Prakrama II.	,,	1211	From Kalinga conquered the whole island.
132	Magha	,,	1214	A Malabar, destroyed temples and records, and put the king's eyes out.
133	Wijaya Báhu III.	Dambadenia	1235	Of the royal family: recovered the throne from invaders, and brought relic from Kotmalee where it had been concealed during Malabar invasion.
134	Pandita Prakrama Báhu III., or Kalikala Supitya	,,	1267	
135	Bosat Wijaya Bàhu IV.	Polanarrua	1301	Murdered by his minister, Mitta Sen, in an intrigue with a woman.

	Name.	Capital.	Years A.D.	Chief Events.
136	Bhuwanaka Báhu I.	Yapahu	1303	
137	Prakrama Báhu III.	,,	1314	
138	Bhuwaneka	Kurnagalla	1319	Kurnagalla made capital.
139	Pandita Prakrama Báhu IV.	,,	No date.	
140	Wanney Bhuwaneka Báhu III.	,,	,,	
141	Wijayabahu V.	,,	,,	
142	Bhuwaneka IV.	Gampola	1347	Built this town for a new capital.
143	Prakrama Báhu V.	,,	1361	
144	Wikrama Báhu III.	Partly Kandy	1371	Kotta selected by the minister as the capital, from its good position near Colombo, much frequented by vessels. Arya Shakarti again invaded the island, fortifying Colombo, Negumbo and Chilaw, but was expelled.
145	Bhuwaneka Báhu V.	Gampola	1378	
146	Wijaya Báhu VI.	,,	1398	
147	Sri Prakrama Báhu VI.	Kotta	1410	Dalada removed to Kotta. This king was murdered.
148	Jaya Báhu II.	,,	1462	Put to death.
149	Bhuwaneka Báhu VI.	,,	1464	
150	Pandita Prakrama Báhu VII.	,,	1471	
151	Wira Prakrama	,,	1485	
152	Dharma Prakrama Báhu IX.	,,	1505	
153	Wijaya Báhu VII.	,,	1527	
154	Bhuwaneka Báhu VII.	,,	1534	
155	Don Juan Dharmapala	Colombo	1542	
156	Raja Siṇha I., son of Maaya Dunnai, Prince of Sittawacca	Sittawacca	1571	
157	Wimala Dharma	Kandy	1592	
158	Senerat	,,	1604	
159	Raja Siṇha II.	,,	1635	
160	Wimala Dharma Suriya	,,	1687	
161	Sriwira Prakrama	,,	1707	
162	Sriwejaya Raja Sinha	,,	1739	
163	Kirti Sri Raja Siṇha	,,	1747	
164	Rajadhi Raja Sinha	,,	1781	
165	Sri Wikrama Raja Siṇha	,,	1798	

CHAPTER VIII.

ANCIENT AND MODERN INDIAN VESSELS.

Most of the native vessels found in the harbours of Ceylon do not belong to the island, but come from other parts of India; some differ little from those constructed two thousand years since, in which eastern mariners traded in the days of Pliny.[1]

The Dhoneys, which come chiefly from Madras and the Coromandel coast, are a very primitive and awkward affair, of ark-like form, with a round roof or top deck raised above the sides of the vessel, often only thatched with cocoa-nut leaves, and the top sides smeared with clay; everything about them is of the roughest and most homely manufacture: the anchors are made of the crooked branch of a tree weighted with stones, and the planks sewn together and fixed with wooden pegs. Holes are bored near the edges of the planks opposite to each other, strong coir thread is then passed through them, and crossed diagonally from one hole to another several times, over a layer of loose coir or dried cocoa-nut leaves, a coating of damar—a kind of pitch—being laid on hot over all. Stitched vessels are very pliant, and considered less likely than others to break up when they get on shore in the heavy surf which prevails on the Coromandel coast.

The construction of vessels by sewing the planks together

[1] Pliny speaks of vessels in Ceylon being constructed with prows at either end, of very large tonnage, "terna millia amphorum," vi. 24. Periplus says "rigged ships with masts and sails were required for Taprobane." The boats of Ulysses had osiers and hurdles for their top sides, and the planks fastened with wooden pegs.—Homer, "Odyssey."

with coir thread is very ancient, being mentioned in "Periplus," which says sewn vessels were built at Baragaza in the gulf of Cutch for the *Arabians*, and native vessels for coasting voyages at Chaberis, South India. It is also mentioned in the account of the conveyance of Buddha's tooth to Ceylon in the year A.D. 310, and by several Arabian writers of the ninth century.[1]

Some dhoneys are large vessels, being seventy feet long, with twenty feet beam; they are flat-bottomed, fore and aft the same, drawing very little water, and have one mast with a lug sail. The smaller ones belonging to Ceylon have outriggers, none of them are owned or manned by Sinhalese, who, although good and expert fishermen in their small canoes, never become sailors; they belong to Moors or Tamils, and are mostly built at Jaffna.

Petamars are quite a different sort of vessel, and come from Bombay; handsome craft, with prow and stern alike, about 200 tons burden, and double planked. The larger ones are fastened with nails and bolts, while the smaller are sewn with coir. Some have two masts with lateen sails; the foremast rakes very much forward to make room for the yard in swinging round.

Arab dhows, according to Pliny the first vessels employed by the Phœnicians and Arabians in the Red Sea, were rude rafts or fragile boats, made of wicker work covered with hides, and some were formed of papyrus, but we are ignorant how these were put together, or made to stand a voyage to Taprobane, where he states they went. They must early have abandoned these primitive constructions for vessels of a stouter description, as we read in Ezekiel[2] that the planks of the Phœnician ships were made of fir, with masts of cedar, oars of

[1] Reinaud, Frag. Arab. p. 93. Plin. lib. vii. 57; vi. 24. The boats of the ancient Britons were also made of wicker work covered with hides, and these tub-shaped machines, capable of holding one or two men, are still used on the rivers of Ireland. Herodotus also mentions them on the Nile and Euphrates.

[2] Ch. xxvii. This prophet is supposed to have lived in the sixth century B.C. Dr. Vincent in his "Periplus" gives a learned commentary on this chapter of Ezekiel, and its application to the shipbuilding of the Phœnicians.

oak, and fine linen of Egypt for sails. In the first century B.C. Agatharchides states that the Arabians had very large vessels, which character they retained down to the sixteenth century. Among others, Purchas informs us Arabian vessels were larger than the English, while the Persian ships, and Indian baghalahs[1] of the same period, were of still greater dimensions, some of them carrying from seven to fifteen hundred persons, and others one hundred and twenty horses. All the mediæval travellers represent them as being of a very rude construction, having their planks stitched together with coir thread along the seams over a band of straw, and fixed to the ribs with wooden pegs, while many had no decks.[2]

Marco Polo says "their ships are wretched affairs, and many of them get lost, for they have no iron fastenings, and are only stitched together. . . . . The ships are not pitched, but are rubbed with fish oil; they have one mast, one sail, and no deck, but only spread hides over the cargo when loaded, and on the top of these hides they put horses which they take to India for sale." Arab horses were brought to Bombay until quite recently, as Marco describes them standing over a date cargo, which does not improve the fruit. The oil used for smearing the vessels was whale oil. The Arab voyagers of the eleventh century describe the fishermen of Siraf in the Persian Gulf as cutting up whale blubber and making oil from it to rub on ships' planks.[3] It seems they were unacquainted with the modern system of calking between the seams of the planking as late as the early part of the seventeenth century, although the calking of Phœnician vessels is mentioned in Ezekiel.

[1] The Indian baghalahs of the present day, which trade between Cutch and Persia, are vessels of about 150 tons; their form is as old as Alexander; they have poop decks and round sterns, nailed together in a very rude and unsafe manner; their top sides are made of mats fixed to posts, and have generally one mast with a lateen sail and a huge yard-arm, made of two poles lashed together at their small ends.

[2] *Vide* Friar Odoric, Ralph Fitch, Cæsar Frederick, &c., Hakluyt and Astley's Coll. Voy. vol. i., pp. 389, 421.

[3] Col. Yule's Polo, i. p. 102. A good account of Indian and Ceylon vessels by Ede, master attendant at Trincomalee, will be found in the J. R. A. Soc., 1834.

None of the early travellers make any mention of the damar, a kind of pitch which is used in sewn vessels at the present time.

Although little different in form and rig, the modern Arab dhow is a very superior vessel to those described by travellers of the sixteenth century, the practice of sewing being generally abandoned. They are grab built, and have a great rise of floor, usually with one mast raking very much forward, a lateen sail, and yard-arm of immense length and weight. Captain Downton mentions that the yard-arm of a dhow of 200 tons in the sixteenth century was forty-three yards long, and that several men were regularly employed in the hold baling out the bilge water. The Arab dhow still retains a semi-warlike character, and carries only a small cargo; they come down with the north-east monsoon, bringing horses, dates, and other provisions. Their crews are handsome and finely-made men, skilful sailors, and acute and intelligent traders.

All the Indian and Arabian vessels, in order to preserve their timbers from the ravages of the "teredo navalis," which are very destructive in Indian seas, are plastered internally with a cement made of chunam or lime, damar, and cocoa-nut oil. The teredo is mentioned by Pliny, who says they will pierce the hardest oak (lib. xi. 1).

Magnetic Rocks.—Aristotle, Pliny, Ptolemy,[1] and other writers allude to the existence of magnetic mountains or rocks in Indian seas. However the strange and fanciful idea originated, early Arabians, as Kaziwini and Edrisi, give this as a reason for using wooden pegs and sewing vessels' planks in preference to iron nails, because, when ships came in the vicinity of these rocks the nails were attracted to such an extent they flew out, and the vessels fell to pieces! Sinbad has made it the subject of one of his romances, and it is mentioned in the travels of Scholasticus the Theban; also by Procopius (De Bello Persico, p. 100), who points out that the idea was erroneous. He says Indian vessels are not painted with tar or anything else, nor are their planks made fast by iron nails, but with cords; and this not as is generally supposed

[1] Plin. lib. ii. 98, xxxvi. 25. Santarem, Cosmo, i. 82; Ptol. vii. 2.

because there are rocks in those seas which attract iron, for Roman ships from Ala (a port in the gulf of Arabia), though fastened with iron are not injured, but because the Indians and Ethiopians have no iron, and the Romans are forbidden to sell it to them on pain of death. Klaproth says the Chinese believed in the existence of mountains in the vicinity of Tonquin and Cochin China that arrested iron-bound foreign ships and prevented their passing that way.[1]

A fabulous native tradition states that the black Pagoda at Karnach, eighteen miles from Jagannathá, bore a "loadstone" on the top, which, as it drew vessels to land, was seized and carried off by some sailors in the time of the Moguls, more than two centuries since.[2]

Ibn Batuta, 1344, in his account of the Maldives, gives the more rational reason for sewing vessels, that they are very elastic, and less likely to fall to pieces among rocks than those fastened with iron nails.[3]

Ancient Chinese Junks.—The Chinese vessels that anciently traded with Ceylon and India were not only built in a superior manner to Indian and Arabian vessels, but were very much larger, in consequence of having to defend themselves from the remorseless pirates, who appear from time immemorial to have infested the Straits of Malacca. They were manned with from two to five hundred, and even a thousand men, well armed, and provided with naphtha[4] to burn their assailants' ships. Each of these junks appears to have formed an independent travelling

[1] "Les anciens auteurs chinoises parlent aussi de montagnes magnétiques de la mer Nerrid sur les côtes de Tonquin et de la Cochin Chine, et disent que si les vaisseaux étrangers qui sont garnis de plaques de fer s'en approchent, ils y sont arrêtés et aucun d'eux ne peut passer par ces endroits." Klaproth, Lettre sur la Boussole à M. Humboldt, p. 227. Johannes de Hese in his Itinerary, A.D. 1389, attributes this property to the Red Sea: "Mare aut iecoseu est talis nature . . . attrahit naues in pfundu ppter feri in eifde nauibus . . tentu . . fundus illi maris de eelapide . . adamate . . attractiu." Itinerarium, ed. Daventree, 1505, p. 2. Kazwini, J. A. S. Beng., 1844, p. 646.

[2] Asia. Res. xv., 327.

[3] Traduc. Defremery, iv., 121.

[4] "On lit dans le Ketab-al-Adjayb que les marchands chinoises ayant quelquefois à se défendre contre les pirates équipaient des navires montés par 400 ou 500 hommes, se munissant d'armes ainsi que de naphthe, pour incendier les vaisseaux ennemis." Voy. Arab., preface, p. lxi.

colony of merchants, who took their wives and children with them, trafficking and bartering from port to port, their voyages occupying several years. They were made of fir, and built in compartments for safety in case of accidents; from which it seems, what is thought to be a modern improvement in ship-building was known and acted upon at least six centuries since. They were fastened with nails and double planked, the centre of the outer row of planks being placed over the seams of the inner ones; when the planks became old, new ones were nailed over them. A cement made of lime, chopped hemp, and the oil of a tree called tong-shee (one of the *Dipteraceæ*) was laid between the planks. They had large oars or sweeps, each requiring from four to twenty-five men to work them, and four or five masts, with sails made of cane or reeds woven like a mat, as they are at the present day. The larger junks were accompanied by small tenders, to which the crew resorted in the event of a storm or accident rendering the large vessel unmanageable or unsafe to remain in. They were also well provided with small boats.[1]

Ibn Batuta gives the following account of those he saw at Calicut in the fourteenth century, which he says were "built at Zaiton and Sinkelan, all made with triple sides, fastened with enormous wooden spikes three cubits long. There are three classes of junks, called Tchowen, Zaon, and Kacam, which are the smallest. Each of the greater ones have twelve sails made of bamboo laths; they are never lowered, but braced this way and that way as the wind blows. Each large junk is followed by three small ones—a half, a third, and a quarter, the size of the principal. In some of these vessels there are a thousand men employed, 600 sailors, and 400 soldiers, cross-bow men, to shoot naphtha. They use twenty large oars, which may be compared to great masts, with twenty-five men to each, who stand in two ranks facing each other, the oars being provided with strong ropes for the men to pull them. Each ship has four decks, and numerous public and private cabins. Some of the cabins have closets, and keys to lock them. The crew take their wives and children with them, and sow vegetables,

[1] Col. Yule's Polo, ii. p. 196. Ibn Batuta, Lee's trans., p. 172.

ginger, and other garden herbs in wooden pots. Each is like an independent city." He adds that the captain was a very great personage or Emir, attended by a guard of honour when he went on shore, formed from the crew of his ship, carrying swords and spears, with drums and trumpets, and some of them stood at the door of the hotel where he staid like sentries all the time he was there.

Friar Jordanus bears the same testimony to the size and strength of Chinese junks in the fourteenth century. He says they put the planks cross-ways. Nicoli di Conti, 1444, also remarks that they built much larger ships than Europeans. Marco Polo says they were not so large in his time as they had been formerly, but Chinese trade with India in the thirteenth century was on the decline, when it was revived by Kubali, which may have led to the return to the large junks described by Ibn Batuta.

We are not informed how the naphtha, which is a liquid, was discharged from the bows, probably by means of wisps of tow steeped in the oil and fixed to the points of the arrows. It has been suggested (Tennent, i. 588) that "the use of naphtha or Greek fire, which was employed by the defenders with such destructive effect in the sieges of Constantinople, might have derived its origin from the Chinese junks which frequented the Persian Gulf and Euphrates." Gibbon (ch. lii.), describing the second siege of this city in the seventh century, says the secret of its preparation was imparted by a Syrian native of Heliopolis, in the service of the Khalif, who deserted to the Greeks. The principal ingredient in this Greek fire was naphtha mingled with sulphur, used in divers ways, being blown through copper tubes, and shot from javelins and arrows, their points having tow fixed to them steeped in the flaming oil. Quatremère, in his notes to Rasch-eddin's "History of the Mongol Kings of Persia" (i. 132), quotes numerous ancient authors, which show that naphtha was employed in eastern warfare centuries before the Chinese appeared in the Euphrates. It was used against Lucullus, the Roman consul, at the siege of Tigranople (B.C. 71), and the Emperor Septimus Severus, in the second century, when besieging Hatra, according to Dion

Cassius (Frag. i. 76; His. l. cxxv. 1265). Procopius (De Bello Gothico, iv. 594) also relates that the Persians at Petra threw vases filled with sulphur, asphalte, and naphtha, on the Romans.

This account of Indian and Chinese vessels is given in order to elucidate the following chapters on ancient navigation.

CHAPTER IX.

EARLY INTERCOURSE BETWEEN CEYLON AND THE WEST.

Was Tarshish in Ceylon?—Although little is said in Scripture that will enable us to determine their real position, the probable site of Ophir and Tarshish has been the subject of much speculation. The majority of biblical critics suppose Tarshish to be Tartesus, an ancient district in the south of Spain, near the columns of Hercules, mentioned by Strabo (iii. 149). Some have sought for it on the coasts of India and Africa. Bochart was one of the first who suggested an Eastern locality, fixing on Cape Comorin as the site of Ophir, and Kudremalee in Ceylon for Tarshish. Sir Thomas Herbert, who visited the island in 1640, says it "was famous in some old conjectures as the site of Paradise and the place whence King Solomon had his gold of Ophir." [1]

It has been suggested that "there were two places called Tarshish to which the Phœnicians traded, one in the north whence they brought tin, iron, and lead, and one in the east which supplied ivory and gold, an island governed by a king, and having a large foreign trade." [2] There is no reason apparently why one of them should not have been the name of the place where the Phœnicians sailed from, to which their ships belonged; Tarshish and Tyre, as mentioned in Isaiah (xxiii. 1, 6, 14, 15), and Ezekiel (xxvii. 12—25), appear to have been the same place or in the same country where Jonah fled to from Joppa (ch. 1—3).

[1] Bochart, Geo. Sacra, iii. 27. Sir T. Herbert's Trav. p. 306.

[2] Tennent, Ceylon, ii., pp. 99, 100, ed. 1859. In a note he says, "Ophir is a generic term in Malay for a gold mine," probably referring to a statement in the Asiatic Researches, i. 338; but in Marsden's dictionary a gold mine is called "Pandie Amas."

A writer in the Journal of the Royal Asiatic Society for 1868, suggests that "Tarsia in the Persian Gulf on the coast of Carmania, mentioned by Nearchus, was the Tarshish of Scripture, and probably the point in the Gulf to which the trade by caravan from the far East was directed. In connection with the story of Jonah and the whale, it is pointed out that the Gulf was formerly full of whales, the houses at Siraf being built with their bones, and that Jonah may have taken ship at Opis on the Tigris, mistaken for Joppa."

On referring to Walton's Polyglot, it will be seen that the Latin Vulgate and the Arabic versions of the Talmud omit Tarshish in several passages, substituting India, while the Targum Jonathan has Africa.

There are many traces that a very extensive commerce, long anterior to the Christian era, existed between the Red Sea and the Eastern coast of Africa, from whence Solomon might have obtained both ivory and gold when he joined the Phœnicians in trade. Edrisi[1] speaks of the quantity of gold at Sofala, in the Mozambique channel, and there is no doubt this coast was one of the earliest places in the Eastern seas from whence gold was obtained by traders from the West.

Crawfurd thinks we may conjecture with considerable probability that Tarshish was a Phœnician factory in the Gulf of Suez or Red Sea, where the ships of Solomon built at Ezion Geber, in the Gulf of Arabia, joined the Tyrian navigators, sailing hence in company with them to Ophir, thus taking advantage of their superior nautical skill to conduct them; the Jews themselves having little knowledge of the sea.

Among those who have written on this subject are Quatremère, Heeren, and Humboldt in his Cosmos.[2]

Of all the places mentioned there are only two which produce gold, the eastern coast of Africa and the Malasia, towards which later writers than Bochart pointed as a probable site of Ophir. Sumatra and Achin produced gold in great quantities formerly, and Malacca was the Aurea Chersonesus of Ptolemy and the early Greek geographers. Valentyn in 1737 says, that

[1] Jaubert's Edrisi, p. 66.

[2] Quatremère, Mém. de l'Acad. des Insc., vi., p. 349. Heeren, ii. p. 73.

in some years Achin exported from 32,000 to 36,000 lbs. of gold, and Barboso, 1512, mentions that gold was so abundant at Malacca it was reckoned by the bahir (4 cwt.).[1]

The time consumed in the voyage by Solomon's ships would imply that they must have gone further than Ceylon, as it could hardly have taken three years to reach the island and return, even if they had crept along the coast the whole way, after the manner of navigation in those days.

Captain J. Davis, in the account of his voyage to the East in 1598, mentions "finding at Achin, near Sumatra, a colony of Jews or 'Rumos,' descendants of those who settled there in the time of Solomon, and had an alphabet which read backwards like Hebrew." There was an aboriginal tribe in Sumatra called Rumbowe, and the similarity of the name may have misled the Captain, as there is no confirmation of his strange story in any other traveller to the Archipelago, except a dubious one in Athanasius Nikiten, a Russian, 1470, who says, "the Jews call the people of Shabat (Silahat) Jews, like themselves; but this is not true, for the people of Shabat are neither Jews nor Mahometans nor Christians, but belong to a different Indian religion." Crawfurd, in his "Dictionary of the Archipelago," says, "the inhabitants of Achin are a taller and a fairer race than the Malays, being of Arab descent and speaking that language." Ptolemy is supposed to have given an Arabian name "Sabara" to this part of the Archipelago, in consequence of the Arabians having a colony there in his time.[2]

With regard to Galle being the Tarshish of Solomon (Kings x. 22; Chro. viii. 18), can it boast of the antiquity claimed by Sir E. Tennent, who calls this port "by far the most venerable emporium of foreign commerce in the universe, and also the Kalah of the Arabs, where the Arabians in the time of Haroun-al-Rasched (circa 765, 809 A.D.) met the junks of the Chinese and exchanged the commodities of the East." They may have done so, but there is no proof of it to be found in any Arabian

[1] Ramusio, 1.

[2] J. A. S. Beng. v. 65. Astley, Col. Voy. Major's "India, Fifteenth Century," p. 22.

writer, being altogether conjecture; all their evidence shows that the ports of Malabar and Cape Comorin were the chief resort of Chinese junks in India (*vide* ch. x.). Sir E. Tennent rests his argument on the supposition "that the names used in some versions of the Talmud for apes, peacocks, and ivory are Sanskrit or Tamil words, inserted among the Hebrew for want of adequate terms in that language to express them, saying *Tukeyim*, which is rendered peacocks in one version, may be recognised in *Tokei*, the modern name of these birds; *Kapi*, apes, is the same in both languages, and the Sanskrit *Ibha*, ivory, is identical with the Tamil *Ibam*," leading us to suppose the same terms were used to designate the articles obtained by Solomon in his time as at present, of which there is no proof. Tamil, like most of the Dravidian dialects, although they were originally quite distinct from the Sanskrit, has been much modified by the introduction of Sanskrit words and other changes, so that the names for many things in modern Tamil are quite dissimilar from the ancient language; as it has no literature even as old as the Christian era, there are no means of knowing what were the names for apes in the time of Solomon, or very much later. It is a question whether the Tamils were in India at all at the period referred to (*vide* ch. vii.).

Mr. Hodgson, whose name is a guarantee for accuracy, has given in the J. A. S. Bengal, 1849, a vocabulary of several Dravidian languages, from which it appears the ancient name for monkey in Tamil was *kaduvan*, and the modern *kurangu*; the name for ivory is not given.[1] The Sanskrit *kapi*, ape, is no doubt almost identical with the Hebrew *koph* or *kop*, and *ibha* may be taken in nearly the same sense, standing for either elephant or ivory, although there are several

[1] Max Müller connects Tokei with the Sanskrit Sikhim, corrupted into Sigi in modern Tamil. The Rev. Mr. Caldwell says, "there are two kinds of Tamil which widely differ, the classical and colloquial, Sheen Tamil and Kodun Tamil. The Tamils have no literature older than the eighth or ninth century A.D., although some Tamil words are found in 'Periplus' and Greek writers of the first and second centuries." Dravidian Gram., p. 66; see also Professor Wilson, J. R. A. S., and a further elucidation of this subject, ch. xxii., Williams' Sanskrit Dict. pp. 894, 1169, 141. Clough, Sinhalese Dict. Priaulx, J. R. A. S., xviii. 351.

other Sanskrit names for them; but it is not so clear that *tukeyim* means peacock; it has no resemblance to the Sanskrit *manyura* or *varhin; tokei* is not modern Tamil, neither is it Siṉhalese, both resembling the Sanskrit. The Siṉhalese for ape is *wanderoo*, for peacock *monara*, and for ivory *danta*, and peacock in modern Tamil is variously called *mijel*, *maynil*, or *sigi*. Crawfurd is of opinion the Hebrew word *Tuchim* bears no resemblance to the name of the bird in any language of India or the islands; his friend Professor Wilson furnished him with the names for peacock in eight of the principal dialects of India, all being corruptions of the Sanskrit *manyura*. *Tuti*, the Arabic and Persian name for a parrot, bears a much nearer resemblance to the Hebrew.

The Rev. R. Caldwell, in his "Comparative Grammar of the Dravidian Languages," takes the same view as Sir E. Tennent with regard to the word *Tokei*, and thinks Solomon may have obtained peafowl from the ports of *Southern India;* he says, "the Hebrew word for them in Kings (x. 22) is certainly Dravidian; the old classical name in Tamil is *Tokei*, in modern Tamil it means only the tail or any similar feathers; if this identification be correct, the Hebrew word is the oldest specimen of Dravidian now extant." However, it must be recollected that Tamil is now, and most probably was always, a foreign language in Ceylon, being only spoken by the Malabar immigrants or their descendants settled in the northern portion long after the time of Wijayo, when Elu was the vernacular of the island, a dialect quite distinct from the Dravidian.

But admitting Solomon did obtain the articles in question from Ceylon, Galle was not likely to have been the port visited by his ships; the first traders to the island came from the north, and everything demonstrates that the earliest navigators of the Indian seas passed through the northern passage as many of the native dhoneys do at the present time, coming down the western coast, and the principal tide of trade has always followed the same direction. Manaar, in the first ages, was probably the emporium, but as commerce went more south, Colombo, from its position and easily accessible harbour for small vessels, eventually became the chief seaport of the

island, as it certainly was when the Portuguese arrived in India.[1]

Gibbon suggests that Trincomalee may have been the emporium, but this fine harbour has always been neglected, in consequence of its being situated on the wrong side of the island. The northern ports must necessarily have been those first frequented by traders coasting along the western shores of Hindustan. It may be mentioned as a case in point that Magellan in passing round South America, naturally sailed through the Straits which bear his name, instead of going outside the island of Terra-del-Fuego. The importance of Galle as a seaport dates from long after the arrival of the Portuguese in India. The name is supposed to be derived from the number of coral rocks (galla) in the sea near the entrance. The seaports of the island are rarely alluded to in the native chronicles, Galle being only mentioned once, viz., during the reign of Prakrama Bahu III., 1267 A.D., a tolerable proof it was not a place of much consequence. Colombo is stated in the "Rajavali" to have been the place where Moogallana landed with an army from India (A.D. 496), and the "Mahawanso" (p. 51) mentions "Mahatitta," the modern Manaar (B.C. 500), as being the port of communication at that time between India and Ceylon. (*Vide* ch. x.)

The northern part of the island being that first colonized from India and the seat of the ancient capital, Manaar from its position must have been the chief rendezvous of vessels from the opposite shores. Manaar is the Epiodorus and emporium of "Periplus," which work also describes the route of the ancient Indian traders as being through the northern passage along the Coromandel coast to the Ganges, and thence by Birmah to Khreuse, the golden Chersonese. The remark in this work that the western coast of Ceylon extended towards Africa, looks as if the island had not then been circumnavigated, or at least that the author of "Periplus" was unaware

[1] Ribeyro. Barboso says, "Colmucho, che é posta sopra un fiume (Kalany) con un buon porto doue ogni anno capitano molti navi da diverse parti. In questa isola vi sono altri quattro o cinque porti."—Ramusio, Viagg. i. 314.

of it. He also mentions that the ports of Cape Comorin were the resort of traders from Egypt.

Bertolacci, in his description of Ceylon, argues in favour of Mantota, the northern point of the island of Manaar, being the ancient emporium, and Sir A. Johnson was of the same opinion, who thought it was there the Chinese brought their goods to exchange with the Arabians.[1] Some pottery, iron chains, and Roman gold coins, supposed to have been brought there by Annius, were discovered during the time of the Portuguese.[2]

Some of the names given by Ptolemy for places in Ceylon can be re-produced in the native form, but Galle is not one of them. This geographer places the emporium called Moduti and Talacoris in the north, one of which is supposed to be the modern Point-Pedro. Galle is not named by any of the ancient geographers or travellers, and it is remarkable that none of the latter, except Plocarmus, mention at what port in Ceylon they landed or departed from, until Ibn Batuta (1344), who arrived at Putlam, and is the first to give any positive information about the seaports of the island (*vide* ch. xii.). Marco Polo coming from Sumatra in a Chinese junk, appears, from his description of the coast, to have landed somewhere about Jaffna.

Among the names of towns in Ceylon given by Edrisi (1154 A.D.), Aghna, derived from Ptolemy's Dagana luna sacra, the modern Dondra, is the only one that can be identified. Albyrouni also makes "Agna" a place of consequence. Sir E. Tennent (i. 598) thinks Agna meant Anuradhapura, but Edrisi and all the Arabians distinctly mark Agna in the south of the island.

Early Arabian intercourse with Ceylon.—Although Ceylon was little known to Roman writers in Pliny's time,[3] there can

[1] Trans. R. A. S. i., iii., p. 538.

[2] E cousa he possivel que fossem estas moedas qui alli levou o liberto de Anio. De Couto, Dec. v. 71. Rodrigues de Saa, "Ceylon," p. 13.

[3] M. Reinaud was of opinion the Romans had commercial establishments at the principal places of commerce in the Oriental seas in the time of Marc Antony and Cleopatra. Jour. Asiatique, 1863.

be no doubt that at a period long anterior to the navigation of the Erythrean Sea by the Egyptian Greeks, the Arabians carried on a trade with India, and visited Ceylon some centuries before the Christian era; it is supposed through them the Phœnicians supplied the West with the costly spices and produce of the East, meeting the Arabian traders at Aden and other ports of the Red Sea, as there is little proof of a direct trade from the West before the time of Hippalus.[1]

Agatharchides (B.C. 113): writes "the Arabians are warlike and able mariners; they sail in very large vessels to the countries where the spices come from, and plant colonies there." An obscure passage in Pliny's account of Ceylon,[2] seems to confirm this statement, and the occurrence of Arabian names on the coasts of India was remarked by Sir W. Jones. Haji Khalfa, in his "History of the Ante-Islamic Times," tells of the universal influence of the old Arabian mariners, and how they sailed everywhere.[3] There is good reason to suppose even long after Hippalus they chiefly supplied the West with Eastern produce. The mention by the ancients of spices peculiar to the Archipelago, and their ignorance of where they came from, can only be accounted for by supposing they obtained them through the Arabian merchants, who, having the monopoly, kept the secret to themselves. We know from Herodotus, that they circulated fabulous stories about cinnamon; and in this way we can account for the absence of any mention of this spice as a product of Ceylon in ancient authors, although in all probability it was brought from the island by the Arabs.

Pliny appears to describe both mace and cloves, saying, "there is also a commodity like grains of pepper, called garyophyllon, but larger and more fragile, produced in an Indian grove." Yet cloves are not named in the "Periplus," being first mentioned as imported into Alexandria in the time of Aurelian, when a digest was made of some old regulations concerning the port (about 180 A.D.), where they are named. The Latin term

[1] Cooley, Hist. Mar. Discovery, p. 90.

[2] Regi cultum liberi patris ceteris Arabum, vi., 24. Asia. Res., ii., 7.

[3] Fugel, Orient. trans.-fund, i., 77.

caryophyllon seems to be derived from the Arabic karnafil. De Couto thought it was. Perhaps Pliny was alluding to cubebs, which are a species of tailed pepper resembling cloves.[1] The descriptions of Eastern commodities given by ancient and mediæval writers are very obscure. Barboso was the first who accurately described them, pointing out where each was produced. Colonel Yule shows that "Budaeus and Salmasius have identified cubeb pepper, called kabab chini in India, with the word 'κώμακον,' which occurs joined to cinnamon and cassia for a confection in Theophrastus four centuries before the Christian era. The word bears a singular resemblance to *kumukus*, the Javanese name for cubeb pepper. If the foundation were a little firmer this would be a curious evidence of intercourse and trade with Java, in a time earlier than Theophrastus. Cubeb pepper was much used as a spice in the middle ages, and imported into Europe, but the importation had long ceased when its medical use became known during the English occupation of Java, and the demand was renewed."[2] Linschotten says, "this spice was called 'cubeb chini,' because the Chinese, before the Portuguese came to India, brought it from Java and Sunda, the only places where it grows; the inhabitants called it 'cumuc'" (p. 130). Barboso also mentions its importation by the Chinese.

The Arabian term "cassider," derived from the Sanskrit "kastira," applied by the Phœnicians to tin, implies that they derived their knowledge of this metal from the East or through the Arabians, and tin is not found anywhere nearer to them than the Indian Archipelago. It is not quite certain to what particular islands the term "Cassiterides" was applied by the Phœnicians, but most writers think Britain was meant, although Strabo (iii. 175) seems to make a distinction between them. Somehow, many of the Arabian writers in the middle ages adopted the Hindu term *kala* or *quala* for tin, although *kasdir* is the true Arabian name; the origin of our word tin is traced to the Malay *Timah*, but how this

[1] "Est etiamnum in India piperis grani simile quod vocatur garyophyllon grandius fragiliusque. Tradunt in Indico luco id gigni."—Plin. xii., 15, 17.

[2] Yule's Polo, ii., 327.

came to pass is not very clear. A Siamese book, translated by Colonel Low, in the J. A. S. Bengal, 1848, mentions incidentally that Arabians visited Ceylon about the end of the third century A.D. (*Vide* ch. xix.)

If we are to believe Chinese annals, the Arabians or Egyptians had made their way to China in the third year of Ching-wang, B.C. 1113? There is an obscure tradition at the Chinese court of men from the kingdom of Nili (Egypt), "who came by sea."[1] Perhaps they brought back with them some of the Chinese bottles and pottery found in Theban tombs, although their authenticity is doubted, it is not improbable their earthenware would be found in Egypt, considering that the Chinese, according to Klaproth,[2] conquered Malay in the second half of the third century B.C., and may have exchanged goods with the Arabians whom they met there.

In 1871 Bretschneider, physician to the Russian embassy at Pekin, published a pamphlet on the knowledge of the Arabians possessed by the ancient Chinese, in which he says their statements about the Arabians are the most satisfactory of all their accounts of foreign countries, which in general are absurd, illogical and worthless, and that Sinologues have made too much of them. These notices of foreign countries, dating from the second century B.C., are inserted at the end of Chinese histories of their various dynasties. Arabia and the Arabs are called Ta-shi, or Ta-hi, they and their country are well described in the history of the T'ang dynasty (618—907 A.D.) An account of Mahomed is found in the annals of the Sui dynasty. In the year 651 A.D. the king of Ta-shi, supposed to be the Emir Al-mumenin, sent an envoy to the Chinese court; again, in 713 A.D., an Arabian envoy brought a horse as a present, but the proud Mahometan refused to bend the knee before the "Son of Heaven," when it appears a scene occurred similar to that with Lord Amherst in 1816. Bretschneider points out a mistake in Reinaud's Voy. Arab., p. 84, where Chinese annals are made to say, the Arabs settled at Canton in the seventh century were numerous enough to

[1] Col. Yule's Cathay, Intro., xxxvi.

[2] Mém. sur l'Inde, ii. 257. Wilkinson's Egypt, iii. 106.

create a riot and pillage the town.[1] The annals only state that "some Arabs and Persians combined, sacked the city, and went back to sea."

A writer in the Asiatic Journal, 1827, contends that the Hindus were the most ancient mariners of the Indian seas, and conveyed Indian produce to Arabia, as the Arabs from the nature of their country could have had little timber to build ships with; however "Periplus," as already seen, states that vessels were built for the Arabians in India. There is no doubt the ancient Hindus were to some extent a seafaring people, and that their merchants traded in Ceylon.[2] A few notices of early exports and imports to the island previous to the Christian era are scattered through the "Mahawanso," which must have been brought by them or the Arabians, as the Sinhalese never engage in maritime affairs.

The exports were native produce, chank-shells, aromatic spices, drugs, gums, and pearls. The imports, rice from India and sandal-wood (250 B.C.), silk and vermilion from China; carpets of woollen fabric, from where not stated, second century B.C.; slaves, chariots, and horses are frequently mentioned; cloth of gold, "cloud stone and frankincense," A.D. 459.

In the reign of Elala, 204 B.C., the son of a caravan chief was sent to a Brahmin who resided near Mihintala, in whose possession there were rich articles, such as sandal-wood and frankincense, imported from beyond the ocean, and there is a fabulous account in the Kashmir Chronicle of a fine cloth from Ceylon embroidered with golden foot-prints.

Greek and Roman knowledge of Ceylon.—It was from the companions of Alexander the Great, Onesicrites and Megasthenes, that the Romans and the classical authors derived their first definite notions of Ceylon, but they are excessively meagre. Alexander is supposed to have formed a project for diverting the trade of the Red Sea to the Persian Gulf; with this object he sent Nearchus and Onesicrites on a voyage of discovery down the Indus and through the gulf to the mouths of the Euphrates, which was successfully accomplished, but Alexander's pre-

[1] See also Vincent, Com. of the Anc.

[2] J. A. S. Beng., 1847. *Vide* ch. iii. p. 25.

mature death, 323 B.C., cut short his plans.[1] The account given by Nearchus of the gulf does not lead to the belief of the existence of any trade in it at that time; some author's have supposed ancient Babylon to have been a commercial entrepot for the Indian produce mentioned by Ezekiel, brought hence to Tyre by this route.[2]

About twenty years after Alexander's death Megasthenes was sent as ambassador by Seleucus Nicator, B.C. 302, to Sandracottus (or Chandragupta), Raja of the Pali, at Palibothra,[3] on the Ganges, the modern Patna, and Pataliputra of the ancient Hindus, supposed to have been built 116 years after Buddha's death. The parentage of this celebrated Raja is rather obscure; according to the Greek historians,[4] Chandragupta was the son of a barber. The "Mahawanso" and Hindus represent him as the foundling of a cattle-herd, having been placed by his mother for concealment in a cow-shed during her flight, as her husband the king was put to death by enemies, being the son of a sudra or low-caste woman, elevated to the throne by the Brahmins.

From information derived at the court of Sandracottus, Megasthenes described Ceylon as a very fertile island divided by a river, which probably meant the Mahavilla-ganga. One part was infested by wild beasts and elephants, better suited for war than those of India; the other part produced gold, gems, and pearls. The inhabitants were named Palæogoni—a Greek term, meaning the sons of Pali or Prasii—the colonists who went there with Wijayo.

Nothing more explicit or detailed appears to have been known concerning the island until the commencement of the Christian era,[5] but that various strange accounts of it con-

[1] Vincent, Commerce of the Ancients.

[2] Bright iron, cassia, and calamus were in the markets, Ezekiel xxvii. 19. Royle, Arts and Manufactures of India.

[3] The date of this embassy is considered uncertain. Smith, Ancient Biog., quoting Clinton in Fasti Hell. iii., 482, makes it 302 B.C. C. Muller, Frag. Scrip. de Rebus Alexandri.

[4] Justinus, lib. xv., 4, 150. Plin. vi., 17. Plut. Alex. 62. *Vide* ch. vii. 135.

[5] Artemidorus of Ephesus, a traveller in the east, B.C. 104, whose writings are lost, seems to have written an account of the isle, from a quotation in Pliny, "Artemidorus in Taprobana insula longissimam vitam sine ullo corporis langnore traduci," lib. vii. 2.

tinued to reach the West, may be inferred from "Pliny (xxxii. 53), who availed himself of the opportunity afforded by the arrival at Rome of ambassadors from Taprobana to the Emperor Claudius, in the year 44, to obtain more accurate knowledge respecting an island about which so many fabulous stories were circulated." But, unfortunately, in consequence of the obscurity of his diction, some parts of his account have remained a puzzle to the present day, no person having been able to explain them satisfactorily, and some have been of opinion that his description did not refer to Ceylon but to Sumatra.[1]

Pliny (vi. 24) states this embassy arose in consequence of a certain Annius Plocarmus, while on his voyage to Ethiopia to collect the tribute due to Rome, having been carried out of his course on the island of Ceylon, where he remained six months, being well received by the natives, who expressed great surprise at the sight of his gold coin. The curiosity and admiration of the king was so excited by Plocarmus's account of the Romans that he sent four ambassadors to Rome, with "Rachia" as their chief; it is uncertain if "Rachia" means the name of this personage, but most likely it is Pliny's way of expressing the Sinhalese title of "Arachy" (or captain); who the sovereign was who sent the embassy, or how they travelled to Rome, is not known. Sir E. Tennent suggests, that, perhaps, he was the Tamil Raja of Jaffna, which is probable, although it is doubted if the Tamils were settled there at that time.

Plocarmus landed at a port he called Hippuros, which a

[1] Strabo, who died A.D. 24, mentions that Ceylon exported to India ivory, tortoise-shell and other merchandise; he notices the elephants, and the seas surrounding it contained cetacean amphibious animals, alluding to the Dugong (lib. xv. i. 690), previously mentioned by Megasthenes. Among the fragments remaining of the works of Alexander Cornelius Polyhistor, a Greek author who lived at Rome (B.C. 80), there is a notice of India and Ceylon which is called Topazius, the isle of gems, on account of its producing the topaz, a precious stone the colour of oil. "Topazius insula indica Alex. Polyhistor dicit reperiri in topaziorum insula gemmam insulæ cognominem, quæ colorem habeat recentis olei similem.". He says of the Brahmins, "Brachmanes neque animata edunt, neque vinum bibunt," quoted by Eupolemo in Muller, Frag. Grec. iii. 237. (Ovid says, "Aut ubi Taprobanem indica cingit aqua." Epist. ex Pont. l. v. 80.)

writer in the Madras Gazette, Sept. 16, 1830, identifies with Kudrumalee on the north-west coast,[1] Hippuros being composed of two Greek words—*hippos*, a horse, and *oros*, a mountain—an exact translation of the name of this place, which he derives from *kudra*, the Malabar and Malay for a horse, and *maya* or *malaya*, a mountain." The Tamil history of Jaffna (quoted in chap. vii.) says, a place in the north of Ceylon was named Kudrumalee from a princess with a horse's face, cured of her deformity by bathing there; but this legend seems to refer to a place of the name near Jaffna. The legend is also alluded to in the "Mahawanso."

The information obtained by Pliny from these envoys was necessarily confused and imperfect, he was told, "there were 500 towns or villages in the island, with a port facing the 'meridian,' and near it a city called Palæsimundæ, the most considerable of all, containing 200,000 inhabitants. There was a vast lake called Megisba, 375 miles in circumference, from which flowed two rivers, one named Cydara, taking a northerly course. The nearest point of the Indian coast was a promontory known as Coliacum,[2] distant four days' sail, and, midway between them, lay "the island of the Sun;" the sea was a greenish tint, having numerous trees (coral) growing in it, which the rudders of vessels broke off as they came in contact when sailing over it. The inhabitants, who lived a hundred years, spent most of their time in hunting tigers and elephants, and fishing, especially catching turtles, whose shells were so enormous habitations were made of them. The ambassadors expressed great surprise at seeing the northern stars, and the sun rise on the left and set on the right hand,

[1] Quoted by Roberts, Orient. Illust.

[2] "Proximum esse Indiæ promontorium quod vocatur Coliacum, quatridui navigatione, medio in cursu solis insula occurrente," lib. vi. 24. Sir E. Tennent, when describing the north of Ceylon, ii. 549, remarks, "Pliny says, the portion of Ceylon which approaches nearest India is Coliacum, and midway between it and the mainland is the Island of the Sun. Assuming the Coliacum of Pliny to be Ramiseram, Delft would appear to be the Island of the Sun." Can the above passage in Pliny bear this interpretation? which was the Island of the Sun is uncertain, but surely Pliny meant that Coliacum was an Indian promontory, and not the island of Ramiseram.

and was just the reverse of their country; some of the people dressed like Arabs."

The number of towns stated to be in the island will not appear surprising, when we know a hamlet composed of a few huts is dignified by the natives with the name of a town. Which was the port cannot be determined, nor Palæsimundæ, the whole island is so named in "Periplus"—if Megisba refers to any of the tanks the dimensions greatly exceed the largest of them ever made in the island. The Aripo river is supposed to be the one named Cydara, the sea of Manaar is accurately described, being shallow in some places and full of coral. It has been suggested that Pliny was alluding to fossil antediluvian turtle-shells, as those of Ceylon, although very large, do not approach the gigantic dimensions he gives them. Barthema mentions that houses were covered with turtle-shells in Sumatra. (*Vide* ch. xxvi.) The surprise of the ambassadors about the rising of the sun is thought to refer to the circumstance that Hindu maps are drawn up side down, placing the south at the top.

A remarkable story, apparently referring to Ceylon, yet speaking of the island as if it were a recent discovery, is found in Diodorus Siculus (lib. ii. 55), who lived about the same time as Pliny. It is supposed to be an interpolation.

Jambulus, the son of a merchant, on his way to the spice countries was taken prisoner by the Ethiopians, placed in a boat with a companion and sent adrift on the ocean. After a long voyage he came to an island rich in all kinds of natural productions, where he remained some years; the details of the voyage are quite fabulous, but the description of Ceylon is not inaccurate; among other things he mentions the custom of polyandry. Some think this narrative does not apply to Ceylon, "the accounts given by Jambulus being chiefly borrowed from those of Ctesias and Megasthenes on India. Prinsep,[1] in his analysis of the Sanchi inscriptions, shows that the alphabet described by Jambulus as used in his island agrees with the symbols on the Buddhist Lats of India." Dr. Vincent says, nine facts mentioned by him as character-

[1] J. A. S. Beng., vi. 473.

istic of the people have been confirmed by recent experience. Wilford applied them to Sumatra,[1] Jambulus remarking that the island abounded with hot springs, which is true of Sumatra, while there are few of them in Ceylon. Wilford's opinion was anticipated by Ramusio, and Lassen thought some island east of Java was meant. An attempt has also been made to establish an identity between Ceylon and the island of Panchæa, which Diodorus describes in the Indian sea, between Arabia and Gedrosia, but the effort has been unsuccessful.[2]

Ptolemy (A.D. 139), describes the whole sea-board of the island, but the names given to the majority of the towns, rivers, and ports are as perplexing to make out, or to identify their situation, as some parts of Pliny.[3] He remarks, the island was formerly called Palæsimundus, but named in his time Salice or Salike, and the natives Salæ : it produced rice, honey, ginger, beryl, hyacinth, gold, silver, elephants, and tigers. Rice was only grown in the north, where tanks had been dug for irrigation ; gems were found in the interior of the southern district, where also the elephant pastures were situated.[4]

The most northern point was Cape Boreum, opposite to Coligium, in India ; four ports are noticed on the eastern and western coasts, Modutti and Talacori in the north were the emporiums ; on the western side were the ports of Margana and Jogana, Cape Anarismundum, the river Soana, portus Priapus, Cape Jovis, and Bay of Prasodes ; on the south, the river Azanius, town of Odea, and Dagana-luna-sacra, with the promontory of the birds of Dionysius and town of same name; on the east, the harbour of Mordu or the Sun—six cities are named : Maagrammum was the capital, and Annurogam the residence of the court ; the principal river he calls the Ganges, and there was a mountain named "Malea"—a multitude of small islands, 1378 in number—lay to the west of the island, and on the east Sabadib, inhabited by cannibals called Battas.

[1] Asiat. Res. x. 151.

[2] Tennent, i. 556 ; Grover's Voice from Stonehenge, p. 95. Dio., lib. ii. 1, 72, 123.

[3] Gosselin, Géog. des Grecs, 5.

[4] Lassen, Indische, ii. 221 Williams Sanskrit Dict. p. 755.

Sir E. Tennent and M. Gosselin have drawn maps to define the position of the places named by Ptolemy, but, with one or two exceptions, no amount of certainty can be arrived at; "Jovis Extremum" and "Bay of Prasodes" would probably be Colombo, and "Dagana" was doubtless the modern Dondra; the mountain "Malea" is only a corruption of Salamala, or Adam's Peak; "the promontory of birds" is seemingly inexplicable. Could the geographer have been alluding to Crow Island in Belligam Bay, so named from the thousands of crows who roost in the cocoa-nut trees, or to Pigeon Island near Trincomalee? "Maagramum" is Sanskrit, Mahagrama meaning a large or populous village. There are many places in the island ending in grama. Lassen places it near the river Mahagrama in the south; Modutti he thinks Mahatitta, or Manaar, and fixes the elephant plains south of Newera Ellia; Sir E. Tennent places Maagramum at Bintenne near Kandy, and the promontory of birds at Galle.

Tomaso Porcacchi, in his "Isolario" (A.D. 1590), also tries to define the position of these places on a triangular map of Ceylon, placing Talacori near Jaffna, "Margana," Aripio; "Anarismundi," Calpentyn; "Soana river," the Dedera-oya; "Anubingara," Negumbo; "Prasodes sinus and Jovis extrema," Colombo; "Azanius," Caltura River; "Avum promontorum," Galle; "Cætum prom.," south-eastern extremity; "Solis portus," Batticaloa.

Sir E. Tennent quotes Mr. Cooley's treatise on "Ptolemy and the Nile," who points out that the exaggerated size given by this geographer to Ceylon proceeded from a fundamental error in his assuming that there were only 500 stadia, or 50 geographical miles to a degree of the 360 comprising the great circle of the globe, thus curtailing it one-sixth of its circumference. He calculates that by increasing Ptolemy's latitudes and longitudes to 600 stadia, or 60 geographical miles, and always reckoning from Alexandria, a more correct measurement will be obtained; "his Taprobana magnified far beyond its true dimensions appears to extend two degrees below the equator and to the 71° meridian east of Alexandria, nearly 20° too far east, when the prescribed reduction brings

it westward and northward till it covers the modern Ceylon, coinciding at the very part of the western coast (Colombo) likely to have been visited by shipping."[1]

If we make this calculation we will obtain very nearly the real latitude and longitude of Colombo, but it seems to be an accidental circumstance; for if this rule is applied to other parts of the East the result will be very different. Ptolemy makes the western extremity of Ceylon 120° east longitude, reckoning from his meridian the Fortunate Isles on the west coast of Africa, one-sixth of 120°, is 20°, which, added to 60°, his longitude of Alexandria, gives 80° east longitude, Colombo being in 79° 45′, which is only 15′ out. Ptolemy's latitude of Alexandria was 32° north, the sixth part of which, 5° 15′, would extend his equator 6° 25 south of Colombo, the real latitude being 6° 55′; it will be seen that this coincidence with regard to Colombo is accidental if we try the geographer's longitude of some other place. Malacca, for instance, which he places in 160° east from his meridian, would by a similar calculation be about 126°, while the real longitude of Malacca is about 100°, making a difference of 26°!

Schœll says Ptolemy made half the globe, or 180°, equal to 72,000 stadia, which gives only 400 stadia to a degree.[2]

Roman intercourse with India, and ancient Navigation.—The first navigators of the Indian seas seldom ventured far out of sight of land, but sailed round the coasts in a tedious manner, directing their course by the flight of birds,[3] which they took with them and let go from time to time; also various signs in the sea, such as the colour of the water, and sea-snakes floating on its surface. The ascertaining a ship's position on a coast by noticing the snakes in the sea is mentioned in "Periplus," which, speaking of the gulf of Cutch, says: "The sign of this place are snakes of a black colour floating on the water; those at Baragaza are green, and at Barake (near Calicut) short and black, more like serpents, with eyes the colour of blood."

[1] Cooley's "Claudius Ptolemy," pp. 45, 53.

[2] "72,000 stades font d'après son calcul 180 degrés, et il croyat connaître ainsi la moitié du globe."—Hist. de la Lit. Grec., lxx. 313—316.

[3] Plin. lib. vi. 24.

Paolino, fourteen centuries after, confirmed the accuracy of this description of Malabar sea-snakes.

The first change in this system of navigation is attributed to Hippalus, a Greek or Roman navigator, in the time of Claudius, who is supposed to have first made known to western mariners the existence of the periodical winds called "monsoons," and applied them to navigation. The word is of Persian or Arabian origin,—"mous, em-e-behaur," meaning a turn or change in the weather—the spring of the year[1]—but it is doubtful if the Arabians availed themselves of them to shorten their voyages until a recent period. As we find in a Turkish treatise on navigation, called "The Mohit," by Sidi-ali-Chelebi, A.D. 1550, translated by Von Hanmer, in the J. A. S. Bengal, 1836, that their route in the middle of the sixteenth century from Aden to Malabar, was first to Guzerat near Bombay, and then by the coast to Malabar working by the stars, sea-snakes, and birds. Abd-oul-Kerym, a Mahometan traveller in 1749, remarks, that while sailing along the coasts of Ceylon they knew they were near the land three days before they saw it, from the snakes in the sea.

The Roman and Egyptian Greeks in the time of Claudius, being anxious to supplant the Arabians in the rich trade they carried on with India, Hippalus, about the year A.D. 47, resolved to profit by the periodical blowing of the monsoons in opposite directions, and abandoning the tedious route round the coasts, at the setting in of the south-west monsoon boldly started across the ocean from the Strait of Bab-el-mandeb until he reached the western coast of India at Mangalore (the Muziris of Pliny), returning six months after with the other monsoon: his countrymen were so pleased with this exploit that they named the winds after him. Considering the age in which it was performed, this voyage was remarkable for its daring. In 1433 the Portuguese, when off Cape Boyador on the north-west of Africa, feared to venture out of sight of land "and risk their lives on the sea of darkness."

[1] Vincent, Commerce of the Ancients, p. 41. This author says the monsoons were not known to Nearchus, for he sailed on his expedition to the Persian Gulf too soon, and was forty days going eighty miles in consequence of the foul winds he encountered, p. 43.

Pliny, speaking of the change, says: "Vessels from Berenice in the Red Sea, now reach Cana on the south coast of Arabia in thirty days, and then steering across the ocean, in forty days arrive at Muziris," from which it would appear Hippalus, after leaving the Red Sea, kept in view the southern coast of Arabia for a considerable distance before he parted with the land at Cana. In the "Periplus" vessels going to India are described as sailing in a straight line from Cape Aromata (Guardafui) to whatever port in India they were bound.[1]

The impetus given to the trade between the West and India by this reduction in the length of the voyage was soon perceptible at Rome, and Pliny complains of the drain of gold to India caused by it, amounting, according to his calculations, to 400,000*l.* per annum of our money. He says, "at the lowest computation, India and the Seres and that peninsula put together drain our empire of one hundred million of sesterces every year; that is the price that our luxuries and our women cost us." This drain of gold from the western world to India has continued to the present day, and is one of the mysteries of commerce, the import of specie usually exceeding the export.

A great part of the gold is supposed to be buried[2] in the earth, or hoarded in various ways by both princes and peasants: a vast quantity is used for jewellery, with which the rich are covered, and more finds its way into the temples. Ferischta speaks of the enormous spoils carried off by the army of Ala-ud-din from the Deccan, A.D. 1311, consisting of 312 elephants, 20,000 horses, and more than 600,000 lbs. of gold, each soldier having twenty-five lbs. weight of the precious metal for his share. Some years later Tuglak loaded 200 elephants and several thousand bullocks with the spoil of a single temple. Wassaf says: "The Raja of Mabar had accumulated twelve thousand millions of dinars—enough to gird the world! and in 1293 A.D., when the Dewar died, 7000 oxen, laden with gems

[1] Cooley, Hist. Mar. Discovery, p. 70; Plin. vi. 26, xii. 41; Lassen supposed the Phœnicians were acquainted with the monsoons.

[2] A great number of gold coins of Augustus and his sons, also of Nero and Claudius, were found near Calicut in 1851, and some of the coins of Antonius and Claudius in Ceylon. J. A. S. Beng., 1851, p. 376.

and pure gold, fell to the share of the brother who succeeded him." Faria-y-Sousa mentions that the Portuguese captured an idol of solid gold weighing thirty lbs. near Calicut. Some of these statements are evident exaggerations, but still show the wealth of India to be very great.[1]

The conquest of Egypt and Sabia by Augustus, whose fleets appeared in the Persian Gulf, led to great intercourse between Rome and India; an embassy from the Pandyan Princes attended his court, and one from Ceylon that of his successor. Several historians mention the Pandyan embassy, which is stated to have been four years on their journey: they brought as presents an elephant, pearls, gems, and a tiger, the first ever seen in Rome. Suetonius attributes their journey to the fame of Augustus, whose virtues allured Indians and Scythians to seek his alliance. Strabo mentions with surprise the number of ships which sailed from Myros-Hormus to India, 120 vessels and two thousand persons engaged in trade, leaving Egypt annually at the commencement of the Christian era, visiting the ports of the Red Sea, Persian Gulf, India, and Ceylon; some even reaching the Ganges. Myros was a port of consequence in the time of Claudius on the Egyptian coast of the Red Sea near the Gulf of Arabia, and the Berenice mentioned by Pliny was situated more south.[2] It is supposed that the goods were conveyed by caravan to and from these ports across the desert to Coptus on the Nile, and hence by boats down the river: the merchants travelled by night. Numerous watering places are indicated by Belzoni, where they rested during the heat of the day, the journey occupying twelve days.

The whole of the East was ransacked for articles to gratify the luxury and extravagance of the Romans, bloated with the pillage of the world—tortoise-shell, ivory, pearls, gems, and probably fine cinnamon were obtained from Ceylon; silk, cloves, and other produce, from the Chinese; cassia from Ethiopia and India, which also furnished various costly articles hitherto unknown in Rome, amongst which was cane

[1] Elliot, Hist. Ind.; Pauthier, Polo; Portuguese Asia, i. 69.

[2] Suetonius, Hist. Aug. ch. 21; Florus; Strabo, xvi. 815; ii. 118; Reinaud, Rel. de l'Emp. Rom. avec l'Asie, 1863; J. Asiat. 1863, p. 97.

sugar. No expense deterred them; the most extravagant prices were paid in Rome for Indian commodities; silk, the most difficult of all to be obtained, was worth its weight in gold; next in costliness was cinnamon; spikenard was worth 3*l.* 6*s.* 8*d.* per lb.; and malabarathum, an aromatic made of cassia leaves, brought 60 denari per lb. These spices obtained at such cost were used in prodigal profusion—210 camel-loads of them being strewn on the funeral pile of Sylla, and Nero was equally profuse at the obsequies of Poppæa. It appears men wore silk as well as women. Pliny says: "The produce of the silkworm we have till now left to women only (xi. 27); an attempt was made to suppress this by law, as an edict was passed in the reign of Tiberius against men wearing it—*ne pestes serica viros fædat*," Tac. Ann. l. ii. 33.—To judge from Pliny (lib. xii., xiii.), an enormous quantity of oils, essences, and unguents obtained from the East and elsewhere were used by the women of Rome for cosmetics. Our author was a great opponent of all this luxury and these costly importations; pepper, which he says "had nothing to recommend it but pungency, cost 15 denari per lb., and for this we import it all the way from India;" among other articles, he mentions "macer," a vegetable substance, or red bark of a tree, brought from India, which cannot be identified, unless he was alluding to mace; and "comacum" (oil of cinnamon). "Arabia, too, produced sugar, but that of India was the most esteemed—a kind of honey contained in reeds, white like gum and brittle." Cane-sugar is first mentioned by Nearchus, described as honey made from reeds and used in a liquid state. It has been supposed the Chinese were the first who discovered a method of crystallizing sugar, but they seem to have derived it from India; sugar is stated in Chinese botanical works quoted by Bretschneider, as having been imported from a country beyond the Ganges A.D. 286, and in 627 A.D. the Emperor T-aitsung sent to India to learn the art of making it. M. Julien also in his "Industries anciennes et modernes de l'Empire Chinoise," says: "The Chinese were taught the art of making sugar from the cane by an Indian religious named Tscow during the years 766 and 780 of the Thang dynasty." The Persian "kand"

and the Sanskrit "kanda," meaning sugar in a lump, appears to be the origin of our word sugar-candy.

Periplus.—A detailed account of the trade of the western world with India and Ceylon after the discovery of the shorter route by Hippalus is given in this work,[1] and shows a great commerce existed, fully accounting for the drain of gold from Rome described by Pliny. The chief emporiums of India at that time were the ports of Malabar, and some about the Gulf of Manaar, opposite Ceylon, described as places of great trade with Egypt. Few of the names of the marts in this neighbourhood can now be identified, except "Kolkhoi," the modern Kayal, supposed to be derived from Ram-Koil, an ancient place connected with Rama.

"Periplus" mentions a heathen temple at Cape Comorin, dedicated to a goddess named "Cumara," and describes the ablutional and bathing ceremonies performed by women in her honour. The term is derived from the Sanskrit Kumari, a virgin, an appellation of the goddess Durga, a Hindu virgin deity, a kind of Diana; a few pilgrims still frequent her shrine, and bathe in her honour.[2] According to Fra Paolino, Cape Comorin was named from her. Marco Polo calls it Comari. Two pearl fisheries are described—one at "Comara Regis," and another at "Epiodori insulam," the first refers to Tutocorin, and the latter to Manaar, not far from Aripo, the present site. Dr. Vincent supposed it was named Epiodori from some Greek who went there in search of pearls, for "where would not a Greek go when anything valuable was to be obtained?"[3]

According to the "Periplus," Ceylon was then called Palæsimunda, having been previously known as Taprobane; the island lay out from the continent in the open sea to the west, and was so large it extended almost to Africa. The northern part was civilized and frequented by vessels equipped with masts and sails. Fine muslins, called "ebargritides," were obtained at Manaar, and pearls drilled ready for market. Salmasius thought the muslin was embroidered or sprinkled with pearls, which would have made it a very costly article of dress, quite

[1] Hudson, Geo. Vet., i. 33,34. [2] Col. Yule's Polo, ii. 318.
[3] Vincent, Periplus, ii. 422.

suited to the luxurious tastes then reigning among the women of Rome, who, we know from Pliny, had their slippers covered with pearls; but the words in "Periplus" hardly bear this meaning, as there is no trace of the manufacture of muslin at Manaar; they were probably brought from Dacca in India, which has been long celebrated for them. The only other produce of the island mentioned are gems and tortoise-shells, although Strabo, years before, names ivory also.

The author of "Periplus" and the time when it was written are unknown, but it has been attributed to Arrian. The writer was probably some Greek trader in the East. Dr. Vincent was of opinion he never was in the island, or further south in India than Nelkynda, a seaport north of Calicut called "Barake" in his work. The scanty and incorrect information it contains about the position of Ceylon would lead to the belief it was composed anterior to Ptolemy. M. St. Martin states in the "Journal Asiatique" for 1863, that he has ascertained from translating the inscription at Adule in Ethiopia, that it was written A.D. 80; "Dodwell assigned the composition of Periplus to the reigns of Aurelius and Lucius Verus; Saumaise, and Dr. Vincent to the time of Claudius or Nero, but the late M. Letronne, whose judgment seldom erred, thought it not anterior to Septimus Severus and his son Caracalla, who reigned jointly A.D. 198 to 210."[1]

Ælian (A.D. 260), in his "De Natura," lib. xvi. 18, gives a short description of the island described as being very large. "The sea about it contained a multitude of fish and whales, with sea-monsters resembling satyrs and women in their faces. Turtle-shells were found in the island fifteen cubits wide, one being large enough to protect several persons from the sun. There were also lions and panthers; elephants of great size were conveyed in large vessels to the continent and sold to the King of Kalinga. There were numerous towns and villages, with houses made of wood and reeds, and the palm trees were planted with order and regularity like a quincunx." This account seems to be chiefly borrowed from Megasthenes, whose description shows that elephants were taken from the island

[1] Cooley, C. Ptolemy, p. 56; J. des Savans, 1825, p. 263.

to the continent long before Ælian's time, although he is the first to speak of a trade in them.

There are a few lines on Taprobane, from which little information can be gathered, in the "Descriptio Orbis Terræ," v. 783, of Rufus Festus Avienus, a Latin poet and geographer, who lived in the fourth century A.D., whose work is founded on the Greek poem of Dionysius Periegetes about A.D. 350.[1] Dionysius says :—

> Inde conversus ante promontorium Australe,
> Confestim ad magnam Coliadis insulam pervenens,
> Taprobanen Asianorum elephantum genitricem.—Ver. 593.

In another Descriptio Orbis, probably the work of a Greek ecclesiastic about A.D. 350, extant only in a Latin translation, there is an allusion to Ceylon: "The mountains of India producing all kinds of gems, pearls, hyacinths, carbuncles, and sapphires."

Agathemerus.—An anonymous Greek geography, judging from internal evidence not older than the middle of the third century, is attributed in Hudson (Geo. Veteris) to Agathemerus, who lived about that time. In Muller's edition the author is not named. This work says, "Among the larger islands, Salice (Ceylon) is the largest; next Albion, then Hibernia, &c." Again, "Adjoining the continent in the Indian Sea, there is a large island formerly called Simunda, but now Salice; it produces all the necessaries of life, and every kind of metal. The men inhabiting it, like women, wear a knot of hair on their heads."[2]

Except an allusion in Ptolemy, this is the earliest notice to be found of the very singular fashion of wearing hair prevailing among Sinhalese men of the south-western districts to the present day. There is only one other ancient writer (Moses of Chorene) who mentions it as a habit of the Sinhalese, but there are several who speak of it in India, where it would appear,

[1] Müller, Frag. Grec., ii. 142, 330.

[2] S. 25 : "Ad hanc continentem in Indico mari pertinet quoque insula maxima, olim quidem dicta Simunda, nunc vero Salice, in qua omnia ad usum vitæ necessaria provinere dicunt, et metallæ omnis generis contineri, et viros, qui eam incolunt, muliebribus cincinnis capita redimire. De Maximis insulis. S. 27 : "Inter insulas plane maximas primum supra omnis locum obtinet Salice, secundum Albion, tertium Hibernia," &c.—Muller, Geog. Gr. Min., ii. 500, 501.

in the early ages, it was not an uncommon practice for men to wear their hair long. Albyrouni says the Indians did not shave their heads before the time of Mahomed. Dracontis (A.D. 450), in his "Carmen de Deo," glorifies the Indians because they received the first rays of the sun; they were very black, and wore their hair bound back off the forehead. This was probably borrowed from Dionysius,[1] who writes, "*crines mollissimos in capite gestant.*" It is also mentioned in Philostratus, "Life of Apollonius of Tyana," who is stated to have travelled in India in the early part of the first century. The Rev. R. Caldwell says, the low-caste Tamils of southern India wear their hair in a knot at the back of the head, and this was anciently practised by the Kotas of the Nilgherries; he supposes the Siṇhalese derived the habit from the Tamils (vide ch. xix.).

Eustathius, Archbishop of Thessalonica (A.D. 1198), in his Commentary on Dionysius Periegetes, compares the licentiousness of the men and women of Ceylon to that of Cyprus when it was dedicated to Venus, and speaks of the Temple of Venus at Cape Comorin (that of Kumari); his statement is confirmed by Abu-Zaid.

C. J. Solinus Polyhistor, whose work, written in the third century, has been translated by Golding, (1590,) in chap. lxv. gives a fabulous account of Ceylon composed from the statements of Pliny, P. Mela, and other writers, and Marcian of Heraclea in his Periplus, (A.D. 350,) takes a few lines from Ptolemy, already quoted in Ch. I.

It is supposed, in order to show the power and influence of the Romans and flatter the Emperor Julian, that Ammianus Marcellinus (A.D. 378,) says, embassies were sent from Ceylon and the Maldives to felicitate him on his accession to the "Purple,"[2] as no confirmation of these congratulations can be found elsewhere.

Moses of Chorene, Patriarch of Armenia, in his "Epitome Geographiæ," fifth century, describes Ceylon as being moun-

[1] Priaulx, J. R. A. S.

[2] "Unde nationibus indices certatim cum donis optimates mittentibus ante tempus absque." Dives et Serindives, lib. xxii. c. 8.

tainous, with several rivers, and one of the largest islands of the world—1100 miles long and 1500 miles broad, and surrounded by 1372 small islands.[1] It was inhabited by many races, and produced gold, silver, gems, and spices, with elephants and tigers; the men wore their hair like women, on the top of their head. There seems to be a strange allusion to Adam's Peak in the words *ibidem Satanæ lapsum narrant*, which may be interpreted, "Satan fell there." If this expression does refer to Adam's Peak, it shows how wide-spread were the legends connected with it.

Moses of Chorene is supposed to have lived previous to Cosmas, and not before the end of the fourth century, from his having translated into Armenian the work of Pappus, a geographer of Alexandria, who wrote about that time. His "Epitome Geographiæ" was edited with a Latin translation by Dr. Whiston, London, 1736. There was another Armenian Patriarch of the same name at the end of the sixth century. The Baron de Saint Croix, in the "Journal des Savans" for April, 1789, says this work was not written by Moses of Chorene, but by some other Armenian in the eighth century.[2]

Palladius.—An account of Ceylon and the Maldives is incorporated in the first part of a curious treatise on India, and the habits and manners of the Brahmins, called "De Gentibus Indiæ et Bragmanibus," variously ascribed to Palladius or St. Ambrose, and professing to describe the travels of one Scholasticus, a Christian of Thebes in Egypt, and his detention for years in some part of India by one of the kings. Many of the details are taken from Pliny, Ptolemy, and others. This work is in several MSS. ascribed to Palladius, Bishop of Helenopolis in Bithynia, who lived at the commencement of the fifth century, and spent the early part of his life in the monasteries of Egypt and Palestine, being made bishop in

[1] "Taprobane insularum omnium maxima in longitudinem undecies centena (1100) millia passum, in latitudinem quingenta (1500) decem patet, atque insulas minores circumjectas habet ad mille trecentas septuaginta duas (1372) sunt in eâ montes ac fluvii, gentesque duodecim. Inveniuntur ibi aurum, argentum, gemmæ, atque aromata elephanti, quoque tigresque. Viri regionis istius capillis muliebribus suâ capita redimiunt. Ibidem Satanæ lapsum narrant."--P. 367, edition Whiston, London, 1736.

[2] Quoted by Sir W. Ousley, Travels; Biog. Univ. Paris.

A.D. 403. It was first published by Camerarius in the "Liber Gnomologicus," (1571,) and again printed under the name of Palladius, with a Latin translation named De Moribus Brachmanorum, also by Sir E. Bisse, Bart., Clarenceux king-at-arms, in 1665, who gave a Latin translation with the Greek text, unaware that it had been previously published. The authorship of Palladius is doubted by Cave, and denied by Oudin. All that can be gathered from the work itself is that the author was a Christian, who visited the nearest parts of India in company with Moses, Bishop of Adule, which would seem to show he lived too early for Palladius to have written it. The translation attributed to St. Ambrose, A.D. 397, is rejected by the Benedictine editors of that father, being merely a free translation of the work ascribed to Palladius.[1] An edition will be found in Migne's "Patrologie" (vol. xvii., 1131).

Only that the island described is called Taprobane, one would hardly suppose it had any reference to Ceylon, so unlike are some of the details to the reality. The idea of clothing the Sinhalese in sheep-skins is rather amusing, a very unsuitable dress for a tropical climate. The broad-tailed sheep spoken of are not found in the island, but in Africa and Candahar. In the version quoted by Sir E. Tennent, the inhabitants of Ceylon are called Macrobi, owing to the salubrious climate and their longevity averaging 150 years. In the Latin version of Migne, the age is stated to be one hundred years, and the name Macrobi is omitted. It is very odd how this appellation came to be applied to the natives of Ceylon, seeing it was the name of a people in Sennar, mentioned by Herodotus and Pliny. Their great longevity is an old story applied to people in various parts of the world. Strabo (lib. xv. 25) speaks of people in India living to one hundred and thirty. Pliny, also, (lib. vii. 2,) has *cyrnos Indorum genus isigonus annis* 140 *vivere item Æthiopes Macrobus et Seras existimat*—in the "Descriptio totius orbis" of the middle of the fourth century. The Carmani, a people who dwelt in the far East, are said to have lived to one hundred and twenty years drinking wild honey and pepper.[2]

[1] Smith, Biog. Oudin, i. 838; Cave, Hist. Scrip. Eccl. i. 376.
[2] Müller, Geog. Grec. ii. 515.

Scholasticus sailed from Adule, and after several days' voyage arrived at Muziris, the principal seaport of India on that side of the Ganges. There he stayed some time making inquiries about Ceylon, and was informed the passage to it was dangerous on account of the numerous islands called Maiolai (Maldives), where there was a magnetic rock which attracted vessels made with iron nails and wrecked them, which information seems to have made him hesitate about undertaking the voyage.

"The island is described as governed by several petty Satraps, subject to one king over all, and had five large navigable rivers which irrigated the whole, *quibus tota irrigatur*. It enjoyed a perennial harvest, flowers and fruit hanging on the same branches. Both kinds of palm trees grew in it. those which produced the *nuces indica*, and the small aromatic species (*areca*). The natives lived on rice and fruit, and clothed themselves in sheep-skins artistically worked. The sheep had no wool, but long silky hair like goats; they had broad tails, and gave much milk. Merchants from Persia, Ethiopia, and other places came to trade in the island, which had a great commerce, its markets being thronged with traders. The island produced pepper in great quantities, which was obtained by people who dwelt in rocky caverns, and from the nature of their country were expert at climbing hills, and thus able to gather the pepper from the thickets. The "Besades," who were very difficult to approach, were a dwarfish, pigmy, and imbecile race, with big heads and long hair. The Theban having proceeded into the interior, got as far as the Besadæ, when he was arrested on the charge of having entered the territory of a chieftain without permission, and detained six years as a slave, subsisting on a daily measure of food issued to him. He was at last released on the breaking out of hostilities between the chieftain and another prince, who accused him of unlawfully detaining a Roman citizen, and set at liberty out of respect to the Roman name."

O. de B. Priaulx, F.R.S., in an article on the intercourse between India and the west, J. R. A. Soc. 1862, comments on the strangeness of Sir E. Tennent having identified the Ved-

dahs with the Besadæ, the description of them being evidently taken from Ptolemy, which had no reference to Ceylon. He says, "The Greek version sends our traveller direct from Auxume into the interior of Africa, where he was not likely to hear anything about the Brahmins; the Latin, on the other hand, after saying everything to dissuade him from the voyage to Ceylon, suddenly and without a hint that he left Muziris, sets him down in the midst of its population. But it is rarely consistent with itself, for it describes Ceylon on hearsay as an island of the blest *in qua sunt illi quibus beatorum nomen est*, and seems to countenance that description, and yet the people our scholar falls among he found a weak, hideous, and inhospitable race. It speaks of pepper as the chief produce of the country, but though pepper certainly grows in Ceylon it is not and never has been among its staple productions, nor to gather it the occupation of its people, but from their name and description Sir E. Tennent has identified the Besadæ with the Sinhalese Veddahs (let me observe that the name is unknown to the Latin version, and belongs to the Greek, which expressly states that our scholar never went to Ceylon (lib. iii. vii.), and appears there in several shapes—as Thebaids, Bethsiads, and Bethsads). The Besadæ are in Ptolemy a people living in the extreme north of India, and except in those great features common to ill-fed barbarous races, bear no resemblance to any Sinhalese people, for though like the Veddahs they are puny, ill-shaped, live in caves, and recognise a domestic chief, the Veddahs, unlike them, have no king living in a palace, no political existence, and no arts such as the existence of a baker implies." The people described by Ptolemy were no doubt some of the aboriginal hill tribes of India, on the Malabar coast, where pepper abounds; there being no peninsula of India in his system of geography would account for his placing them in the north.

Cosmas.—The most interesting of the early accounts of the island is that of Cosmas, a merchant of Alexandria, who lived in the time of the Emperor Justinian, A.D. 535, and was called from the extent of his commercial voyages "Indico Pleustes," or the Indian Navigator. His real name is supposed to be hidden in that of Cosmas, which is merely a surname or title

Retiring to a cloister at Alexandria in after life, he composed some works on cosmography, including an account of Taprobane, dying while engaged at this task about 550. The only part of his writings left is called the "Christian Topography," an exceedingly curious book, full of strange drawings by the author's hand, fac-similes of which are given, accompanied by a new French translation, in Chartron's "Voyages," Paris, 1854. The "Christianorum opinio de Mundo" was printed entire from the MS. in the Vatican, by Montfaucon, in the "Collectio Nova Patrum et Script. Grec." Paris, 1706. The learned editor says the work was written A.D. 547. There was another MS. in the library of St. Laurent, Florence, from which Thevenot had extracted and previously published the part relating to India in his collection of "Travels," Paris, 1576. Heeren gave an English translation of the part about Ceylon in the appendix to his "Historical Researches," in 1833. Sir E. Tennent's was the next, and subsequently Colonel Yule published the greater part in his "Cathay." There is also a Latin version in Migne's "Script. Grec." (vol. 88, p. 446). By some it is conjectured that Cosmas was the same person as a monk of the name, who lived in Jerusalem, and wrote a treatise on the art of making gold. There appears to be little doubt that he visited Ceylon in the course of his journeys; although he says he obtained part of his information about the island from Sopater, a merchant whom he met at Adule, it seems to relate only to the anecdote about the gold coin.

Cosmas says "Taprobane is a great island of the ocean, lying in the Indian Sea. The Indians call it Sielediba; the Greeks, Taprobane. Here the stone called hyacinth is found. It is situated beyond "Mele," the pepper country. Round it are a great number of small islands, very close to each other, containing fresh-water springs and cocoa-nuts.[1] The great

[1] Thevenot adds here, "Le fond de la plus part de ces îles est de sable," which do not appear to be in the original text. Cosmas uses the word "Argell" for cocoa-nut, probably from the Sanskrit narakela or the Persian nargil. "Gaudia" appears to mean a native measure called a gaow or gow, which is still in use in Ceylon. A gow contains four hatackmas, meaning the distance that can be walked in a Sinhálese hour of twenty-four minutes, a somewhat indefinite mea-

island, according to the natives, is 300 "gaudia" long, and the same in breadth. There are two kings in the island, who are always at war with each other. One rules the part producing the hyacinths, and the other the remaining portion, where there is a great mercantile emporium and a port much frequented by neighbouring people.[1] It has a Christian church for strangers who come from Persia, from which country are sent a priest, a deacon, and all things necessary for performing religious worship. The natives and the king are pagans,[2] and they have numerous temples; in one in particular, situated on an eminence, is the great hyacinth, as large as the cone of a pine tree, and when the sun shines on it, its brilliancy is extraordinary. Sielediba, from its central position, receives a great number of vessels from India, Persia, and Ethiopia,[3] and many

sure, as it allows a shorter space to a man walking up hill or over difficult ground, to what he could perform on a level road; it also allows a difference between a man who carries a load and one who does not. Taken at average speed on a level road, a hatackmas is less than an English mile; and a gow three miles, or the distance that can be walked in an hour of sixty minutes. Dr. Vincent, in his "Commerce of the Ancients" (i. 506), says the gow is the same as the Tamil naligiai or one mile and-a-quarter. *Vide* Turnour's "Epitome."

[1] Thevenot translates it, "L'un est maître de la partie de l'île où se trouvent les jacinths, et l'autre de celle où est le port le plus haute, et qu'on peut dire est le plus fameux de toutes les Indes." Gibbon, "Decline and Fall," ch. xl., makes it, "Ceylon was divided between two hostile princes, one possessed the mountains, the elephants, and the carbuncle, and the other the more solid advantages of trade and commerce." Dr. Vincent, Heeren, Migne, and Reinaud, "Rela. de l'Empire Romain," p. 293, interpret the passage, not that the king possessed a gem, but that he ruled the part of the island where the hyacinths were found, which is only in the southern portion, and as this version is quite opposed to Sir E. Tennent's theory, that Galle was the emporium alluded to by Cosmas, which then could only be in the north, he says the passage does not bear this meaning and renders it, "There are two kings ruling at opposite ends of the island, one of whom possesses the hyacinth" (i. 567). However, Cosmas says it was in one of the temples, (*vide* ch. xii.,) but taking it either way, it by no means proves that Galle was the emporium. The native chronicles throw no light on the subject; according to them Anuradhapura was at that time the residence of the court; there is no mention of a rival sovereign, but there had been a civil war about thirty years previous.

[2] Col. Yule has the natives and the king as quite another sort of people. Sir E. Tennent, the natives and their king are of different races.

[3] The Ethiopians, who carried on a large trade with Ceylon in the sixth century, are said to have possessed 600 vessels.—J. Asiat. 1863, 407. If the vessels sent from the island belonged to it, which is Thevenot's version, they were probably owned by Persians and Arabians settled there. By inner countries, Cosmas

ships are sent from it. It receives from the inner countries, I mean Tzinesta and other emporiums, silk, aloe-wood, cloves, chandana,[1] and other productions of those countries, and exports them to the outer countries, I mean Male, whence the

meant to the eastward, as China, and by outer countries those to the west, as Malabar. Sir E. Tennent, with Thevenot, has clove wood also, but this is not in Montfaucon's version. Some writers say clove wood means the small stalks to which the clove buds are attached, and were an article of commerce formerly, which Budæus considers to have been the cinnamon of Theophrastus, "Cathay," ii. 305. Girarde in his Herbal, 1535, says that they are only old or male fruit which fall off the trees, and get injured by rain when on the ground. There is a kind of cassia lignea in flat pieces called massoy bark and clove bark, the produce of one of the laurels (*C. Culilawan*, Blume) common enough in India, though rarely seen in London. Pereira, "Mat. Med." i. 437. This was probably the *Kirfat-al-Karanful*, or bark of clove of the Arabians, and the *Fusti de gherofarmi* of Pigoletti and Uzzano. Ibn Batuta says it was imported into his country.

[1] "Chandana" is the Hindu for sandal wood. Sir E. Tennent calls it *Agallochum*, which is aloe-wood (*Agila*), *vide* ch. x. Calliana or Kalliana has been supposed to mean Calicut, others with Rennel think it Bombay. As there are no tin mines in India to make brass, it must have come from the Archipelago, and the copper probably from China. The "Periplus" mentions as exports from Baragaza sinus (Gulf of Cutch), "brass, sandal wood, beams, horns and planks of ebony and sasam wood," evidently the sissu of the Hindus (*Dalbergia latifolia*) a valuable black timber of Western India; it also grows in Ceylon. The French translation of Chartron (ii. 28) has "La sésame et d'autres plantes avec lesquelles on fait des vêtements." Sesame is a small annual plant that yields the gingili oil, and has no fibres, the (*Sesamum orientale*). Thevenot was more correct in making sesame a wood like ebony. Col. Yule says this word puzzled both Dr. Vincent and Salmasius to interpret it. "Cathay," pref. clxxviii. Sindon means Sind, and the Homeric coast the southern part of Arabia Felix. Androstachum is probably a mistake for nardostachys or spikenard, the oil of the *Andropogon nardus*, one of the lemon grasses. Thevenot renders it *la spica nardi*. Marallo is supposed to be Manaar. In naming the distance of the island from the main-land, Cosmas probably meant from some of the western ports of Cape Comorin. Cochlea may mean chank shells (*Turbinella rapia*) of which there has always been a fishery at Manaar. Thevenot has *quantité de huîtres ou perles*: it is odd Cosmas should omit to mention these gems. The site of Kaber has not been identified. Chartron's version renders *alabandanum* as perfumes, and Thevenot, who calls kaber macer, has *noix de muscade* or nutmegs, which certainly cannot be the meaning, as Col. Yule remarks of this very puzzling word, he quotes Pliny (xxxvii. 25) who speaks of alabandic carbuncles and marble from Caria, and the name of alamandine or alabandine is given to a species of ruby in the "Dictionary de Trevoux." If Cosmas meant rubies, then Kaber would be Pegu, which produces the finest of these gems. In Milburn's "Oriental Commerce," a gum called labdanum, obtained from the *Cistus ladaniferus*, is mentioned as an export of Persia and Arabia, which may be the article in question; Pliny xii. 37, mentions that it was highly valued by Roman ladies as a cosmetic.

pepper comes, to Calliana, where there is brass and sesam wood, and materials for dress, as it is a place of great trade; and to Sindon, from whence they send castor (musk), and androstachum to Persia, and the Homeric coast, and Adule, receiving in return the productions of those places, and forwarding them to the inner ports of India, along with her own produce. Sieledíba, or Taprobane, is nearly five days' sail from the main land. Further on the continent is Marallo, which produces "cochlea." Then comes Kaber, which exports "alabandanum." Next the clove country; then Tzinesta, which exports silk, beyond which there is no other land, for the ocean surrounds it. Thus Sieledíba, being placed as it were the central point of India, and producing hyacinths, receives and sends goods to and from all nations, and is a great emporium."

Cosmas mentions that horses were imported from the Persian Gulf, and exempted from custom duties, and elephants were exported to India, to be used in war, being, he says, "considered, from their size and sagacity, superior to those of the peninsula."

The King appears to have had a monopoly in their sale, as he says the King of Sieledíba measured them, being valued in proportion to their height; the price was from fifty to one hundred nomissima or gold solidus, supposed to be equal to 10*s*. of our money. Cosmas alludes to their small tusks, in common with those of India, compared to African elephants, who were captured for the sake of their ivory, which was imported to India.

Cosmas applies the term Tzinesta to China, which is equivalent to the Chinsthana of the Hindus, and Chinistan of the Persians; Moses of Chorene calls it Zenastana, a Latinised version. Tzinisthan occurs in the Syriac Christian inscription of A.D. 781 on the stone dug up in 1625, at Singafur in China.[1] The most ancient name for China was Seres or Sina, which occurs in Ctesias B.C. 400. The term "metaxa," used by Cosmas for the silk imported from China, means silk thread or unspun yarn, serica being a general title for silk whether manufactured

[1] Pauthier, De l'Auth. part vi., pp. 14—38. Cathay, pref. xlix.

or not. "Metaxa is more Latin than Greek; a yarn broker was called metaxarius; the modern Greek for silk is very similar; it is also found in Procopius."[1] From this it appears, that in the time of Cosmas it was silk yarn that was brought to Ceylon to be afterwards manufactured in the "West." The workmen of Tyre and Beyrout wrought into tissue the metaxa imported long before the nature of the material was known. Barboso mentions that even in his time (1572) silk in skeins was brought from China overland to Ormus.

Ceylon is supposed to have been "one of the most ancient of emporiums for silk brought there by the Chinese,"[2] but in reality there is no mention to be found of silk in connection with the island, for commercial purposes, before Cosmas. The only silk marts of India mentioned in "Periplus" are the ports on the southern and western coasts of the peninsula, where it was brought from the Gangetic provinces.

Silk became a general article of dress among the Romans about the time of Claudius, when Hippalus opened the new route to India. We learn from Pliny that the silk worn in Rome was of a very thin description, for he exclaims against Roman dames exhibiting their charms in such transparent gauze, and ironically claims for Pamphila, a woman of Cos, the "glory of having invented a dress in which women were naked although clothed." "Bombyces telas araneorum modo texunt ad vestum luxumque fœminarum, quæ bombycina appelatur. Prima eas redordiri, rursusque texere inventit in Ceo mulier Pamphila, Latoi filia, non fraudanda gloria excogitatæ rationis, ut denudet fœminas vestis" (xi. 26). The Chinese appear also to have manufactured this transparent kind of silk, which seems to have been similar in texture to what is now called bombasin, gauze, or crape, before it undergoes the crimping process, and they probably exported it, but they do not appear to have exported the stout, closely woven class of silk. Abu-Zaid says the Chinese mandarins alone wore silk of the first quality, and mentions that an Arab merchant saw a mark on the chest of a man through several folds of silk. Dacca muslins of the kind

[1] Tennent.

[2] Major's "India, Fifteenth Century," intro. p. xi.

called "woven wind" are also noted for their transparency; "an Indian lady rebuked by Akbar for the indecent transparency of her dress, replied that she had nine on." [1]

The production of silk was unknown in Europe until the sixth century. Theophanes of Byzantium relates that in the reign of Justinian, a certain Persian exhibited in Byzantium the mode in which silkworms were hatched, a thing the Romans had never known before; he had brought with him from the country of the Seres the eggs of the worms concealed in a walking-stick.[2] Procopius says, "some monks who had been in China, learning that the Emperor wished that the Romans should no longer buy silk from the Persians, came to him, and proposed to bring some of the eggs of the moth which produced the silk. The caterpillars could not be brought, for they would die, but the eggs might be kept and afterwards hatched; this was accordingly done, and some were brought in a bamboo cane" (lib. iv. 17). According to M. Gasparin, the monks of St. Basil, who smuggled them into Europe, obtained the eggs in Tartary; all persons were forbidden under pain of death to take the eggs of the silk moth from China.

The ancients appear to have been acquainted with some sort of silk fabric before the time of Pliny. Aristotle, the most ancient of naturalists, distinctly describes the cocoon of a kind of bombyx, saying, "From a certain large worm and caterpillar is produced a bombylino, from this animal certain women unfolding silk, draw it out into a thread and afterwards weave it; but Pamphila, the daughter of Latois, is said to have been the first that wove with threads of the silkworm in the Island of Cos. (Hist. Ani. v. 19.) 350 years after, Pliny repeats this as his own (xi. 27), adding a strange description of the moth, said to be a native of the Isle of Cos, and that the cocoons were rendered soft and pliable by the aid of water and then drawn out. From which it might be inferred that the Romans were acquainted with the art of rearing the silkworm, which is very improbable. Pliny's description shows he really did not know

[1] Cathay, pref. cliv

[2] Müller, Frag. Grec. iv. 270.

how the moth became transformed into the cocoon. It is more likely, as he indicates in the next passage, "the produce of the Assyrian silkworm we have till now left to women," that the cocoons unwound by the women of Cos previous to being woven into a fabric, were imported as they are at present to England and countries that do not produce them.

Dr. Milman, in a note to Gibbon (ch. xl.), thinks Pamphila merely wove silk in Cos from materials brought from Asia, in the same way, as Procopius says, it was brought some centuries later to be woven at Tyre. There can be no doubt the art of rearing the silkworm and unravelling the cocoon was first practised by the Chinese, where silk has been worn from time immemorial. P. Malin, in his "History of China," states that silk was known there in the time of the Emperor Hoang-te, B.C. 2600.

It is not improbable that some kind of cocoons were obtained from Asia or North-eastern India before silk was brought from China. Pausanius, the traveller, (A.D. 174,) says the worm was of Indian extraction (lib. vi. 349). *Vide* ch. x. and xxvii.

Cosmas concludes his observations on Ceylon by relating an anecdote told him by Sopater, who he says is now dead thirty-five years. Sopater, in one of his trading voyages which was made to Taprobane from Adule, happened to arrive in Ceylon along with a ship from Persia. The Adule people with whom Sopater was, disembarked at the same time as the Persians, and were presented by the officers of the port to the King, being well received by him; in the course of the interview the King asked which were the greatest people, the Romans or the Persians? Sopater succeeded in convincing the King that the Romans were a greater people than the Persians because they had gold coin, producing a "nomissima" or gold solidus, while the Persians had only silver "dirhems" to show as the currency of their country. Plocarmus mentions the admiration of the Sinhalese at seeing the gold coins of Rome he had with him when he was wrecked on the island. There is no doubt the possession of a gold coinage is a potent argument in favour of the wealth of a country in all ages.

Sir E. Tennent suggests that the King referred to in this anecdote was Kumara Das, who reigned in A.D. 515; but this is inconsistent with his theory of Galle being the emporium, as Kumara Das's capital was in the north. Probably he was some petty ruler on the coast; Sopater give us no clue to it, by omitting to state where he landed.

CHAPTER X.

CHINESE VOYAGES AND INTERCOURSE WITH CEYLON.

It is uncertain whether commercial intercourse between China, India, and Ceylon was first carried on by sea or overland. Marine insurances are mentioned in the laws of Menu (the Moses of India), and Professor Wilson was of opinion there was commerce by sea between India and China at a very early date, the navigators being Hindus. The earliest intimation we have of an overland trade is found in Pliny's account of the embassy from Ceylon to Rome—if that interpretation can be put on this very puzzling passage, from which it appears to have been by the Gangetic provinces of India to that portion of China north-west of Burmah; but, as Colonel Yule remarks, it is almost impossible to make out anything satisfactory from Pliny's obscure statements.

Who the large men with red hair and blue eyes were, has mystified everybody; he says, "the Seres, who dwell beyond the mountains of Emodos, were known to them by commerce, the father of Rachiæ has visited their country, and they had seen them themselves on their travels; they are of great stature, have red hair, blue eyes, coarse voices, and no common language," &c.[1] "Later travellers, it is stated, have also had glimpses on the frontiers of these German features, but nothing is yet known with certainty of the tribe to which they

[1] "Ultra montes Emodos Seras quoque ad ipsis aspici, notos etiam commercio: patrem Rachiæ commeasse eo: advenis sibi Seras occursare. Ipsos vero excedere hominum magnitudinem, rutilis comis, cœruleis oculis, oris sono truci, nullo commercio linguæ, cetera eadem quæ nostri negotiatores fluminis ulteriore ripa merces positas juxta venalia tolli ab his, si placeat permutatio, non aliter odio justiore luxuriæ quam si perducta mens illuc usque cogitit quid, et quo petatur, et quare."—Plin. vi., 24. Cathay.

belong."[1] Klaproth says, "the ancient Thibetans painted themselves red," which would, perhaps, account for the red hair. Wilford, in an article in the "Asiatic Researches" (ix. 41), shows that it is probable, during the first intercourse between China and Ceylon, the merchants went by sea to the Gangetic provinces, where they met the Chinese traders coming down by Burmah. "Periplus" says, "beyond the Khreuse lies a city called Thina, not on the coast but inland, from which both raw and manufactured silk are brought by land, then down the Ganges, and from thence by sea to Malabar." The traders, who came to the frontiers of Thin from the interior, are described as a dwarfish, wild-kind of people, who brought every year goods in baskets and held a fair; we are not told what the goods were, and can only conclude it was the silk mentioned, probably from the forests of Upper Assam, where the cocoons of the Tusseh moth (*Phalæna atlas*) are obtained by the natives at the present time.

The first authentic information of Chinese commerce with India in their annals, by the overland route, occurs B.C. 122. There were three roads by which Shintu (Sind or India) might be reached from China, one leading by the Kiang; this route is described as being very dangerous. A second was by the north, through the lands of Hionque. The third, and safest, by Szechuen or Keenwii, through the Sin-chu mountains and Brahmaputra valley, Upper Assam.

Although the information concerning this route is very meagre, there is little doubt commerce was carried on between Ceylon, India, and China at the commencement of the Christian era, and continued for many centuries. Rashed-udden (1247), in his "Cyclopedia of History," says that the two ways to China diverged at Mabar; the first was by sea, *viâ* Sarandip, La Muri (Sumatra), and Darband-nias (a dependency of Java), Champa and Hainan to Maha chin. The other road from Mabar to Cathay, was apparently an overland route by the Coromandel coast, Bengal, and the Indo-Chinese countries.[2]

[1] Cooley, Hist. Mar. dis. p. 71.

[2] Cathay, intro., p. clxi.—J. A. S. Beng. vi. 61. *Vide* ch. on Cinnamon.

Fa-Hian (A.D. 400) describes meeting with Chinese merchants in Ceylon, making an offering of a white silk fan at Buddha's shrine. This traveller came by Thibet to India, crossing the Himalayas near the Indus, subsequently sailing from Tamlook, on the Hoogley, in a vessel for Ceylon, leaving the island in a junk for China; which shows that, in the fourth century, both the long sea and overland routes were used; he says, "the voyage from Tamlook to Ceylon, the wind being favourable, only occupied fourteen days."[1] Proof that both routes were used in the fifth century, is found in the address delivered by the envoy of King Maha-nama to the Emperor of China (A.D. 428.)

Chinese annals contain obscure notices of a commerce with the Roman Empire (202 B.C.), and in the first century of our era they say the way to the Red Sea was by the Indian Ocean, by which route they could hardly have failed visiting Ceylon in passing along the coasts,—these annals say Rome was reached from the country of Persia by traversing the sea obliquely for a distance of 2,000 miles. "The Ansi and the people of India drive a great and profitable trade with this empire by the way of the great salt sea, and merchants sailing hither are obliged to provide themselves with three years' provisions, hence there are few who succeed in reaching so remote a region."[2] About the year A.D. 100, Pauchao, a Chinese dignitary, is stated to have dispatched one of his officers, named Kan-ying, to make his way to Tathsin, or the Roman empire, who succeeded in reaching the "western sea," when he returned. Bretschneider, already quoted (ch. ix.) says considerable uncertainty exists about this journey (in common with most of the statements in Chinese annals), no details can be found in their works of the route followed; some savans say he reached the Caspian Sea, others the Persian Gulf, or Indian Ocean; the land of T-iao-chi, on the western sea, reached by Kan-ying, may have meant Syria, Ansi (Parthia), or a place in India. Bretschneider thinks the

[1] Fa-Hian, Beal's, p. 100.

[2] M. Pauthier, De l'Authen., i. 35; *Idem*, Jour. Asiat. 1863, p. 341; Cathay p. lvi.

General went by the commercial road through Samarkand and Bactria to the Mediterranean, existing probably from the time of Alexander.

Chinese Junks in Western India and Euphrates.—It is now tolerably certain that Chinese junks traded in the Persian Gulf and mouths of the Euphrates many centuries since, notwithstanding Gibbon's incredulity on the subject, who remarks, "I am not qualified to examine, and am not disposed to believe in their distant voyages to the Persian Gulf or the Cape of Good Hope."[1] Since these lines were penned, several Arabian works have been translated, which places the question almost beyond a doubt, the period when they first appeared in the gulf is uncertain. M. Reinaud, in his "Voyages Arabes" (pref. xxxv.), states that "two Arabian writers agree in saying that in the first half of the fifth century of our era, vessels from China and India were often to be seen anchored before the houses of the town of Hira or Hilla, then an important place, subject to the Shah of Persia, built on a branch of the Euphrates, south-west of the ancient Babylon;" the present town is at some distance from the river, which has changed its course.

Sprenger, in his version of Mas'udi, makes the same statement (p. 247), but in a recent translation by M. Meynard the evidence as to the early date assigned is not so precise, as Mas'udi seems to speak of their being there only in his own time (A.D. 912).[2] Klaproth, in his "Mémoire sur l'Inde,"[3] states that Chinese annals gives details of the route of their junks from Canton to the Euphrates in the seventh and eighth centuries. Soleyman brings them to Siraf, in the Persian Gulf, a century later, saying they formerly went higher, although Bretschneider intimates that he can find no confirmation of this Arabian's statement in the Kang history, or any allusion to Kaulam. Edrisi describes[4] them as trading

[1] Decline and Fall, ch. xl.

[2] "Aujourd' hui cette ville—Killah ou Hilla—est le rendezvous des vaisseaux musulmens, qui s'y rencontrent avec les bâtiments de la Chine. Mais il n'en était pas ainsi autrefois."—Mas'udi, traduction Barbier de Meynard, p. i. 308.

[3] *Vide ante*, p. 219.

[4] D'Herbelot, Dict. Orient., pp. 111, 300.

with Ceylon and at Diabal, near the mouths of the Indus, bringing there stuffs and other articles from China, and gives a list of Chinese goods obtainable at Aden, comprising iron, sword blades, shagreen, rich stuffs, and velvet; some of the articles being the same as those Barboso (1512) mentions their bringing to India, viz., blades of knives, lances, swords, steel, cubebs, porcelain, and cloves. Khordadba also, in his "Book of Routes" (A.D. 850), makes Aden an entrepot for Chinese and Indian goods.

Michel Boym, a Polish Jesuit, who spent some years in China as a missionary (1652), says: "There were formerly sometimes to be seen in the Persian Gulf four hundred Chinese vessels laden with Ceylon cinnamon and other goods." As he gives no authority for this, it was probably obtained from Portuguese writers, such as Texeira and Garcia, who make a similar statement, saying it was recorded in the annals of the town of Ormus.[1]

Another testimony as to the presence of the Chinese in the Persian Gulf is found in Theophanes of Byzantium,[2] end of the sixth century, who says, "for at that time the Turks were in possession of the marts and ports frequented by the Seres, which had been formerly in the possession of the Persians." Col. Yule remarks, in giving this passage in his "Cathay" (clx.), "The mention here of the ports frequented by the Seres is remarkable, and the only indication of the Seres under that name as a seafaring people—if the expression can be relied on, the ports in question must have been Sind."

With the decline of the Roman Empire the Persians and the Mahometans became predominant in the Eastern seas; this, together with the introduction of the silk-worm into Europe, and the great revolution in China (A.D. 878), described by Abu-Zaid,[3] caused the Chinese gradually to withdraw from the Persian Gulf; but they continued to carry on a large trade with western and southern India, and went as high as Aden up to the middle or end of the fifteenth century, after which period they finally disappeared from the Malabar seas, linger-

[1] Thevenot, Relation des Voy., pp. 11, 25. [2] Müller, Frag. Grec., iv. 270.
[3] Voy. Arab.

ing on the eastern coasts of the peninsula, at Chittagong and other places, half a century later. There are two or three independent testimonies to their presence at Aden about the period named. Ibn-el-Vardi says they visited it in the fourteenth century. In the history of the Ming dynasty (A.D. 1368 to 1628) it is stated the voyage by sea from Ormus to Arabia occupied forty days, and intercourse existed with Aden, which place is accurately described, but the last year they went there is not stated;[1] also in Quatremère's "Mémoires sur l'Egypte," it is mentioned "that in the year 833 of the Hegira (A.D. 1455), several Chinese junks came to trade on the coasts of India; two of the fleet, laden with porcelain, silk, musk, and other valuable produce, separated from the others and went to Aden. The Sultans of this port and Egypt were at that time contending with each other for the trade of the Red Sea, and high import duties at Jeddah drove the junks to Aden."[2]

A'bd Oubrizag, ambassador from Shah Rokh, son of Tamerlain, to the king of Bisnagor (A.D. 1443), mentions that merchants from China and Ceylon came to Ormus; but he says nothing about their junks. In Major's "India in the Fifteenth Century," this traveller is called Abd-er-Razzak, and he makes an ambiguous remark regarding Calicut, which would lead to the belief Chinese junks were there then, saying, "the inhabitants of Calicut were adventurous sailors, called Tchini betchizan (sons of Chinese), and pirates do not dare attack the vessels of Calicut."[3] Baldæus speaks of Chinese inhabiting Cochin, and their skill in catching fish.

Sir E. Tennent, speaking of Chinese junks in India, remarks,[4] "at a later period their utmost limit was Siraf, then Muzeris, next Calicut, then Coulam, and eventually, in the

[1] Bretschneider.

[2] "Plusieurs jonques chinoises étaient venues trafiquer sur les côtes de l'Inde; deux d'entr' elles, chargées de porcelaine, de soie, de musc et d' autres objets de prix, allèrent aborder au port d'Aden," etc.—Quatremère, Mém. sur l'Égypte, ii. 291.

[3] "Il n'y a pas de ville semblable sur la face de la terre, les marchands y venant de la Chine, Maha-Chine, Pekin, Ceylon, etc."—Langles, Coll. Voy., i. 1; Major's India, p. 19; Elliot, India, iv. 100.

[4] Vol. i. 565, ed. 1859.

fourth and fifth centuries, Chinese vessels appear to have rarely sailed further west than Ceylon." The dates given probably meant the fourteenth and fifteenth centuries; but even so, it will be seen that the ports of Western India were the resort of numbers of Chinese junks in the middle of the fourteenth century.

Colonel Yule[1] says he can find nothing definite as to the cessation of Chinese navigation to Malabar, but he believes it ceased about the beginning of the fifteenth century; he quotes Joseph of Cranganor, in the "Novas Orbis," ed. of 1555, who says, "These men of Cathay formerly drove a first-rate trade at Calicut, but the King treated them badly, and they quitted the city, but returning soon after to chastise the place, made a great slaughter of the inhabitants; after which they returned no more."

Paolino also says they were ill-treated by the Zamorin and stayed away from Calicut, coming no longer to Malabar, but only to Maliapatam in Narsinga on the Coromandel coast.

It is strange that neither Di Conti nor any of the numerous Portuguese and Italian travellers at the end of the fifteenth century make any mention of them in Western India, except Barboso,[2] who, speaking of Chittagong near the Ganges, says, "There are here many foreigners, Arabs, Persians, and Abyssinians, who own large ships of the same build as those of Mekkah and others of the Chinese build, which they call 'jungos,' which are very large and carry a considerable cargo; with these ships they navigate to Cholmender, Malabar, Cambay, Piegu, Tarnasari, Sumatra, Ceylon, and Malacca." It is doubtful from this passage whether Barboso meant the junks went to Malabar and Ceylon, or if he was only alluding to them as trading between the Archipelago and Chittagong; he also mentions their manner of repairing old ones by nailing new planks over them three or four times. A.D. 1455, the year they visited Aden, is the latest mention to be found of them in Western India, and their intercourse with Ceylon ceased about the same period.

[1] Polo, ii. 327.

[2] Sommario dell' Inde; Vincent, Periplus, ii. 410.

Knowledge of the Mariner's Compass possessed by the Chinese. —Although the use of the mariner's compass was not known to the Europeans much before the middle of the thirteenth century, its perfecting being generally attributed to a Neapolitan named Flavio Gioia, in the year 1300, it is surmised that the Chinese, who were acquainted with the magnet 1110 years before Christ, had devised some sort of compass many centuries before this instrument was used in Europe, its possession accounting for their early and adventurous voyages, as Procopius, who wrote soon after Cosmas, (A.D. 525,) tells us that Chinese vessels then arrived in greater numbers than formerly in the Indian seas, and that the Persians and Ethiopians bought silk from them to be sold to the Romans (De Bello Persico, lib. iv.-ix.). Still the period when they first made a practical use of their knowledge of the magnetic needle is involved in much mystery. A Chinese dictionary, compiled about 120 A.D., makes mention of a stone that guided a needle ; and the dictionary of " Poei-wen-yun-fow," dated 265 to 419 A.D., intimates obscurely that vessels were then directed to the south by the magnet. Yet the first clear description in Chinese works of a compass resembling those now in use occurs about the year 1111 A.D. ; and the perfecting of the mariner's compass is attributed in a Japanese dictionary to a European, about the time of Flavio Gioia,[1] who was probably the first who arranged it in its present form of a circular card revolving on a pivot enclosed in a box.

The earliest invention used by the Chinese was a fish-shaped piece of wood armed with a magnetic needle, floating on water in a vessel or glass bottle ; and in an Arabian work, dated 1242 A.D., quoted by M. Reinaud in his " Géographie d'Aboulféda," mention is made of a similar contrivance to direct ships at night. The Chinese also chiefly used them at night.

That the Greeks and Romans had some vague notions of the polarity of the magnet may be inferred from an obscure passage in Plato and some verses in Claudian. It was supposed that the earliest allusion to the use of the compass for vessels in Europe was that of Guyot de Provius, who speaks of one in

[1] Klaproth, Lettre sur la Boussole.

a poem called the "Bible," 1190 A.D. But Mr Wright, quoted in Major's "Life of Prince Henry of Portugal," has recently discovered that it is mentioned in the treatise "De Utensilitus," 1180 A.D., by Alexander Neckham, a native of St. Albans, who was professor in the University of Paris. Jacques de Vitry, a bishop, who went as a Crusader to Palestine, 1204, speaks of them as an established thing; and Friar Bacon, 1258, had a floating magnet; from which it would seem a rude sort of compass was used in Eastern Europe at the time of the Crusades, being probably derived from the Arabians, who most likely obtained it from the Chinese. Santarem says, it would appear that while the Arabians of the Red Sea had a compass in 1377, those of Morocco and the northern European mariners knew nothing about it; and there is no drawing of a compass to be found in Europe before the fourteenth century.[1] The English version of the Acts of the Apostles, ch. xxviii., 13, has, "from which we fetched a compass."

The use of the compass does not appear to have been general in Europe even in the middle of the fifteenth century, which may be surmised from the words of Prince Henry of Portugal when urging on his sailors round Cape Boyador, saying, "You come to me with the statements of four seamen who have been accustomed to the voyages to Flanders or some well-known route, and beyond that have no knowledge of the needle or the sailing chart."[2]

According to De Barros, when the Portuguese arrived in India, the Arabians and Moors of Mozambique had a square compass, also charts and triangular and quadrangular instruments in brass for taking the altitude of the sun and stars, Dec., i.-iv.

Barthema expressly mentions the use of a compass by the Chinese mariners of the Archipelago at Borneo in 1505; also Juan Serana, a Portuguese, in 1512; while Di Conti states, Indian vessels had none, steering by the stars.[3]

The south is the cardinal point in the Chinese compass, called by them "Chin-nan," or indicator of the South, and the

[1] Santarem, Cosmo., i. 281, 299 [2] Major, pp. 57, 82.
[3] Ramusio, i. 168, 344; Prinsep, J A S Beng., 1836, p. 793.

Arabian term Kiblat-nama means the same; the Chinese and Arabians, in common with the Hindus, place the South at the top of their maps.

The exploit of Hippalus in crossing the Indian Ocean from the Red Sea to Mangalore was nearly as daring as the Chinese voyages; but for some reason the Egyptian-Greeks or Romans seem to have seldom ventured beyond the coasts of India for trading purposes, even up to the sixth century, after which period their power declined, and their vessels ceased to visit the East. "Periplus" says it was not easy to get to "'Thina,' and few come from it," and it is exceedingly doubtful if any of the Egyptian-Greeks ever got any further than the Aurea Regio or Malacca, although it might be inferred from Ptolemy that a few adventurers more daring than the others had succeeded in reaching "Kattigara," almost the "Ultima Thule" of his eastern geography, supposed to refer to Borneo.[1] Schœll, in his "Histoire de la Littérature Grecque," (ch. lxx.) says, "The mariners in the time of Ptolemy finding, when they arrived at the Ganges, to their surprise that the land tended south instead of north as they expected, took advantage of this discovery to shorten their voyage to Siam and Malacca, traversing the Bay of Bengal in a straight line after they had sailed some distance up the Coromandel coast, a discovery made by one Alexander."

Chinese annals, it is stated, mention an embassy from Marcus Aurelius, A.D. 166, carrying presents to the Emperor of China, which went by sea, entering China by Tonquin; one from Diocletian, A.D. 284, and another from the Emperor Carius, A.D. 233; but it is not explained in whose vessels they sailed, and probably the embassies were undertaken by merchants in the course of their trade, a manner of sending envoys not unusual in those days.[2]

With regard to the surmise that it was the possession of a compass that enabled the Chinese to perform their long voyages, it must be admitted there was nothing to prevent them reaching Arabia from China by a semi-coasting voyage

[1] Ptol. Geo. ii. 14; J. R. A. S., 1868, p. 152; Vincent, ii. 507.

[2] Cathay. Remusat, Mém. de l'Acad. des Inscrip., viii. 116, 125.

without one; there was no great ocean to venture over, and the distance across the Bay of Bengal in a straight line from Sumatra to Ceylon is less than from Cape Guardafui to Mangalore, accomplished by Hippalus without a compass. That the Chinese took this shorter route as early as the fourth century is shown by Fa-Hian's account of his voyage from Ceylon, "sailing *eastward* with a fair wind; but a hurricane soon after carried them out of their course to a small island where there were pirates, eventually reaching Java." The period corresponds with the time mentioned in the dictionary "Poei-wen-yun-fow," when Chinese vessels were first guided by the magnet. Yet Fa-Hian says they steered by the stars, sun, and moon.

Did the Chinese stop at Ceylon on their way to and from the Euphrates?—It is difficult to make out with any degree of certainty the exact route followed by the Chinese junks on their voyages to and from China and the Euphrates; nor can we glean from the accounts given us, if they usually touched at Ceylon on their way.

Soleyman, in "The Voyages of the Two Mahomedans," giving a description of the route of the Chinese in the ninth century, says, on their journey home the junks took in cargo at Siraf, near Shiraz, in the Persian Gulf, the goods coming there from Omar, Bassora, and other places. Siraf is not marked in modern maps, but Nasir Edentusii (A.D. 1261), places it in the centre of the eastern coast of the gulf. "The junks were not able to go higher up the gulf at that time in consequence of shoal water."

"From Siraf they went to Muscat, taking in their water and cattle; leaving Muscat with the north-east monsoon, it took them a month to reach 'Koulam Mele,' described as a frontier place and arsenal, where Chinese vessels, on account of their great bulk, paid 1000 dirhems duty, and other ships from one to ten dinars,[1] according to size." Mele or Melibar was the

[1] It is difficult to estimate accurately the value of these coins. Col. Yule says the silver dinar of Barbary was worth 12*s.*, and that of India 3*s.*; a dirhem was much less than a franc.—Cathay, p. 441.

Arabian name for the south-west coast of India, hence the modern Malabar. M. Pauthier traces the name to the aboriginal Mala or Malaya, meaning mountainous, the chain of the Ghauts running along the coast. Cosmas calls it Male. Koulam, variously spelt, Kaulam, Kollum, or Coilum, is the modern Quillon, a seaport near Cape Comorin, an ancient and important place up to the sixteenth century, dating from A.D. 660 ; but is now of no consequence. Ibn Batuta says it was a very fine town and chief resort of Chinese junks and merchants in India, who were very rich and owned many vessels. Varthema and Barboso also speak of it as a fine port with many merchants. Kaulam was long the seat of a Latin bishopric called "Episcopus Columbensis." Jourdan de Séverac, author of the "Mirabilia," was one of its bishops, A.D. 1328. It has been confounded with Colombo in Ceylon by Sir Thos. Herbert and other travellers, from the similarity of name, and formed part of the dominions of the famous Sri Perimal, King of Malabar, whose rule extended from "Goa to Colombo."

The Catalan map has "Regne lo Rey Colombo que est Chretien." Barboso says the Kingdom of Coulam, which reaches to the frontier of Ceylon.

Kubali had a great deal of intercourse with Kaulam. De Mailla mentions the arrival at Zayton, in 1282, of envoys from Kiulan, an Indian state, bringing presents of various rarities, including a black ape as big as a man.[1]

Kaulam was not the only port in Malabar and Southern India frequented by Chinese junks. Ibn Batuta mentions thirteen large ones being at Calicut while he was waiting there for a passage to China.

Wassaf, an Arabian (A.D. 1310), speaking of Mâbar, says, "The curiosities of Chin and Machin (China), and the beautiful productions of Hind (India), and Sind, laden on large ships which they call junks, sailing like mountains with the wings of the wind on the surface of the water, are always arriving there. The wealth of the isles of the Persian Gulf in particular, and in part the beauty and adornment of other countries, from Irak and

[1] Col. Yule's Polo, ii. 273, 306, 314.

Khurasan as far as Rum and Europe, are derived from Mabar, which is so situated as to be the key of Hind."[1]

M. Pauthier quotes Chinese annals, which relate that the Pandyan kingdom of "Ma-pa-ra," Mabar, and "Kiu-lain," were places under the subjection of the Emperor of China, and that in the year 1286 they sent tribute to Kubali (p. 603.)

Raschid-uddin, another Arabian (A.D. 1247 to 1310), also says Mabar was much frequented by junks of large size, called by the Chinese Tchouen, bringing choice merchandise. Mabar produced pearls, rubies, and aromatics The merchants exported silken stuffs and aromatic roots.

Numerous Chinese remains, such as coins, pottery, and bricks, with inscriptions, have been found in various parts of Mabar and Cape Comorin; particularly at Kayal, on the Tamrapanni river, the Kolkhoi of Ptolemy and "Periplus," a noted place of commerce down to the time of the Portuguese, being mentioned by Varthema and Barboso. Marco Polo, who calls it Cail, remarks: at this city "all the ships touch that come from the west, from Ormus and Kis, and from Aden and all Arabia, and there is great business done in this city."

Colonel Yule says, "In 1846, the ruins of a remarkable building of uncemented bricks, that has since fallen to pieces, were to be seen about a mile north-west of Negapatam, on the Coromandel coast, which popularly bore the name of the Chinese Pagoda, and had an architectural resemblance to buildings at Pollanarua, in Ceylon. Negapatam was celebrated as a seat of Buddhist worship. Sir W. Elliot obtained in the neighbourhood many Byzantine, Chinese, and Hindu coins."

It will be seen from these numerous quotations that Southern India, and not Galle, was the chief rendezvous of Chinese junks during the Middle Ages. There are no similar remarks concerning junks frequenting any port of Ceylon to be found in Arabian or other mediæval writers; in fact, except Edrisi and Cosmas, they are almost silent on this subject, which is very remarkable, as there can be no doubt the Chinese did trade in the island, although it was not evidently their principal resort in India.

[1] Elliot, ii. 69.

"Leaving Kaulam, and passing Cape Comorin," Soleyman says, "the junks entered the sea of Herkend, and sailed through it." This was the name given by Arabian geographers to the sea surrounding the western and north-western coasts of Ceylon, comprising the Gulf of Manaar, and Hind that on the Coromandel coast. It is uncertain from Soleyman's statement whether he meant they passed through the northern passage, or "doubled Ceylon."[1]

Ibn Khordadbah, in his book of routes (A.D. 850), says: "On the route to China you leave Serendib to the left,"[2] which means they passed round it. The expedition sent by Kubali Khan[3] to Mabar, in 1286, appears from the words "attendront la montagne Sing-ki-le," to have followed the same way, as Adam's Peak, the mountain alluded to in this passage, could only be visible from the southern sea coasts.

Khordadbah, who is not very intelligible in his accounts, in another part of his book writes as if some passed through the channel—"From Mele, where there is pepper, to Balbein, is two days' journey, and from thence to the great sea, two days' At Balbein the route divides; following the shore, it takes two days to Bas, which is a large place, and where you can take a passage to Sarandip." The remainder of the route is unintelligible, neither "Balbein," nor "Bas," can be identified.

There is reason to suppose that the water in the northern passage was not so shallow formerly as it is at present. If the passage has been becoming shallower from the causes described in Chap. IV., at the rate of only two feet in a hundred years, although almost imperceptible during the life-time of an individual, the water would have been deep enough, when Soleyman wrote, nearly a thousand years ago, for the largest sized junks to pass through.

[1] M. Reinaud is of opinion they passed round the island. "Les navires qu' aucune affaire n' appelait dans l'île de Ceylon, doublaient-ils l'île, ou bien passaient-ils entre l'île et le continent? Cette question n'a pas été tout-à-fait résolue, les témoignages Arabes semblant la décider d'une manière satisfaisante. Les vaisseaux chinois doublaient l'île."—Voy. Arabes, preface, p. lx. *Vide* Tennent, i. 587.

[2] "La route de Chine laisse à gauche l'île de Serendib. Ibn Khordadbah was postmaster-general and director of police in Dzebal Media."—Jour. Asiat., 1865, p. 288.

[3] Pauthier's Polo, p. 603.

A missionary friar in Mabar,[1] John of Montecorvino, speaking of vessels passing the northern passage in his time (A.D. 1292), shows that large numbers must have availed themselves of this channel; for he mentions that as many as sixty were wrecked at a time. They only passed once a year, in consequence of the monsoons not answering at any other period. He omits to state what nation these vessels belonged to, but a great many of them must have been Coromandel dhoneys, which to the present day come down this route with the north-east monsoon. The place where the vessels were wrecked was most probably Point Pedro, near Jaffa. The north-east monsoon often blows heavily on this point, with a tremendous surf, and frequent wrecks occur among native vessels.

Cæsar Frederick,[2] a Venetian merchant traveller, 1590, mentions that large ships, in order to lighten their draft of water in passing through the Paumban channel, used to unload part of their cargoes into small vessels or boats, which accompanied them to the other side, where the goods were again put on board the large ships. Perhaps the Chinese junks adopted this method.

D'Herbelot, in his "Bibliothèque Orientale," suggests that the term "Mâbar," or "Mébar," was applied by the Arabians to that part of Southern India opposite Ceylon, because it was the route from India to China.[3]

Colonel Yule says, "The name was given by Mahometans to a tract corresponding in a general way to what we call the Coromandel coast. The word signifies a ferry in Arabic, and may have referred either to a communication with Ceylon, or probably to its being in that age the coast most frequented by travellers from Arabia and the Gulf. The name does not appear in Edrisi, nor, I believe, in older geographers. Its earliest use is in Abdallatif's account of Egypt, A.D. 1203, found in De Sacey's 'Relation.'"[4]

[1] Cathay.

[2] Hakluyt, Coll. Voy., ii. 225.

[3] "La troisième partie et la plus orientale de l'Inde s'appelle Mâbar ou Mébar, mot en Arabe qui signifie le trajet ou le passage à cause que l'on passe de cette partie des Indes à la Chine."—Bib. Orien. p. 415.

[4] Marco Polo, ii. 268. Klaproth gives the route of the Chinese from Canton

"Mahatilla," the ancient name of Manaar, means literall the great ferry.

The Island of Kalah.—After leaving Cape Comorin, the junks, whichever way they passed Ceylon, crossed the Bay of Bengal, to the Nicobar islands (Lankabalons), the inhabitants of which are described by Soleyman as being naked cannibals, who did not know Arabic, or any other language used by the merchants who frequented them. From thence they sailed to Kalah. Soleyman, who calls it "Kalah-bar," the additional "bar" meaning a coast, says it was situated on the coast to the right hand beyond the Indies, and took one month's voyage from Kaulam to reach it. From Kalah they passed through the Straits of Malacca to Betuma,[1] probably the modern Binting, a small island opposite Singapoor, which occupied ten days; hence they sailed to Kedring, (Cambodia,) and through the sea of Sanji (Chinese Sea) to Kaufou (Canton), taking nearly two months more. Fa-Hian says the voyage from Java to Canton generally took fifty days. The distance is about 2,000 miles, and is now accomplished in twelve days.

Kalah was a commercial rendezvous of importance in the Middle Ages, and the attempt to show that it was not in Ceylon will be unavoidably prolix. Nearly all the Arabian geographers and writers place it in some part of the Indian Archipelago. Some of them call it a city, others an island, and all name tin as the chief production, which is quite opposed to Sir E. Tennent's idea that it was in Ceylon where this metal is not found. The term Kalah is probably derived from *Kalai*, or

to the Euphrates in the seventh and eighth centuries as follows:—"Les annales de la Chine nous ont conservé les détails de la route que prenaient sous la dynastie des Thang dans les vii^e^. et viii^e^. siècles, les navires qui, partant de Canton, traversaient le détroit de Malacca, d'où ils allaient à l'île de Ceylon, au Cape Comorin à la côte de Malabar aux embouchures de l'Indus, et ensuite à Siraf et à l'Euphrate."—Mém. sur l'Inde.

[1] M. Reinaud, Voy. Arabes, p. 18, has sought to identify Betuma with Meliapoor, near Madras, because Betuma bears an accidental resemblance to the Syriac Beith-Thauma—the house or church of St. Thomas, this apostle having been buried at Meliapoor; but this would be bringing the junks back again to the Coromandel coast after they had passed the Nicobar islands on their way to China. (?)

Qu'la, the Hindu and Persian for tin, which is found in great quantities at Junk Ceylon,[1] Queda, and other parts of the Straits of Malacca. Kalah may have been the small island on the north-western coast of Malay, now called Junk Ceylon, a curious proof how names become changed from their original meaning, being derived from two Malay words, *Ajunk*, a large vessel, and *Selang*, interchange, or commerce, Chinese junks having formerly made the island a rendezvous. M. Walckenaer,[2] a German traveller, thinks Kalah was the modern Queda, a province in the peninsula of Malay, a Portuguese corruption of Kâdah, the correct Malay name.

According to Abu-Zaid, Kalah was a great entrepot for goods and rendezvous of Arabs, half way between China and Oman, producing aloe wood, camphor, sandal, ivory, spices, and tin. On referring to a map it will be found that the half-way position between Oman and China, if we include the bend at the Straits of Malacca, would bring this place much nearer the north-west coast of Malay than Ceylon.

Edrisi, describing the seas of India and China, takes part of the following passage from Khordadbah's Book of Routes :— "From Serendib to the island of Lankalous is ten journeys, and from Lankalous to the island of Kalah six journeys. Kalah is a very large island, situated in the neighbourhood of Selahat, and contains an abundant mine of tin. The king is called Djaba, or the Indian prince."[3] In this geographer's map Kalah forms part of the island of Sumatra.

Ibn Mulhalhal and Ibn-el-Vardi say Kalah was the only place in the world where tin or lead was found;[4] and Kazwini, quoting the first-named Arabian, remarks, Kalah was the first

[1] Ralph Fitch, 1586 A.D., speaks of the tin at "Junk Selon," which, along with other islands in the Straits of Malacca, supplied all India at that time. Junk Ceylon some years since produced 8,000 tons of tin annually. The chief produce of Quedda is tin.—Milburn, Oriental Commerce, p. 324.

[2] Annales de Voyage, 1832, tome i., 19.

[3] "De Serendib à l'île de Lankalous 10 journées, de Lankalous à l'île de Kelah 6 journées * * * qui est très grande et où demeure un Roi qu'on nomme Djaba, ou prince Indien. Il y a dans cette île une mine abondante d'étain."—Edrisi, trad. Jaubert, i. 77, 80.

[4] Quoted by Col. Yule, Cathay, pref., p. cxci.

Indian town reached on the overland route from China by Siam. It produced tin, and was subject to the king of Siam.[1]

Mas'udi says "the fourth sea of India, that of 'Kalah-bar,'[2] was the same as the sea of Selahat, which had shallow water, and was full of small islands with tin mines, where the natives used poisoned arrows," an exact description of the Straits of Malacca.

The island of Kalah is described by Arabian writers as forming part of the dominions of the "Raja of Zabaj or Zabadj," a powerful and mysterious potentate of the Middle Ages of whom little is known except that his rule extended over a great part of the Indian Archipelago. One of the places comprising his dominions was called "Komar," or Comar, which Sir E. Tennent identifies with Comar in the Deccan, or Cape Comorin, and extends his rule also to Ceylon; but it will be seen that Komor and Komar-Malay were terms variously applied by the Arabians to the peninsulas of Malay, Cambodia, and the island of Madagascar, which they seem to have confounded with each other.

Mr. Cooley, in his "Essay on Ptolemy and the Nile," says that "this name was derived from Komr, the Arabic for green, a term applied by them to the sea on the eastern coast of Africa near Madagascar, and that Ptolemy's mountains of the moon, the Jebal-el-Kamar of the Arabs, were derived from the same source," being an interpolation in his text, for he knew nothing about these mountains. Macrize says, in the sea of Zinj there was a great island named Al-Komr: is it not likely that this great island represents in reality that group of four islands now called Comoro, a name unknown to the natives? Philostorgius, a writer about the end of the fourth century,

[1] "Kalah terra Indica media in via Omanam inter et Sinas sita in continente sub linea æquinoctiali. Kalah urbs Indica magna altis quam Musir-ben-Mulhalhil, proximam Indiæ regionem Sinas, ibi Qualaah est."—Kazwini in Gildemeister, Script. Arabum, pp. 200, 211.

[2] There were several seas named by Arabian geographers between Arabia and China: the sea of Larwy on the western coast of India, and Gulf of Cambaye, those of Herkend and Hind, round Ceylon and Southern India, and that of Selahat or the Straits of Malacca. The last is a name of Malay origin, Salat meaning a strait or narrow sea.—Mas'udi, i. 341.

says, "The African side of the Erythrean Sea is named Kamar, from the moon . . . thus we can trace undoubtedly in a Greek author of the fifth century the confusion of terms which originated with the Arabs," pp. 86-9.

The great island of Madagascar appears to have been also known to the Arabians as the island of the moon, from Al-Kamar, the Arabic for the moon. There is no doubt their traders in slaves penetrated all along this coast, and into the interior of the continent, with which they were well acquainted ages ago. Mr. Major, in his "Life of Prince Henry of Portugal," p. 334, quotes a very rare work, entitled "Relatione del Reame de Congo," by Pigafetta Roma, 1591, which shows that the two great lakes, Victoria and Albert Nyanza, were known to and described by the Portuguese from information gathered in Africa three hundred years since. There is also a map of the sixteenth century in the college De Propaganda Fide, Rome, where the central lake of equatorial Africa is laid down in nearly its exact position. Pedro Covilham, who was sent, in 1487, to India by the King of Portugal, sailed from Goa to Sofala, and sent information to his master "that ships from Guinea might pass round the continent by sailing south, and when they arrived in the eastern ocean they should inquire for Sofala and the Island of the Moon." Friar Mauro, in his account of the Indian junk, says, "they passed between the Green island and the darkness." Edrisi says, "Komr is a very long island, the king of which lives in *Malai*. Komr is one day's sail from Dagutta, a place on the coast of Africa, near Sofala." This is an accurate description of the shape and situation of Madagascar on the African coast; but the Arabian geographers fancied the continent extended eastward until it joined Siam. This naturally brought one end of Madagascar over against Malacca; hence they also called it Malai. The Arabian mariners could hardly have been so ignorant on this point as their geographers, for they must have been aware, as they sailed along the coast of the Mozambique channel, that the African continent tended westward, and could be circumnavigated long before the Portuguese passed the Cape, and informed Covilham so.

The Arabians were as far south as Sofala in the tenth century. Al-Biruni says: "The ocean extends as far as Zanzibar, and thence to what are called the mountains of the moon, whence spring the sources of the Nile." It seems very probable that the placing the mountains of the moon in Africa proceeded from a confusion of ideas, being originally applied by the Arabs to the great peak 8,000 feet high in the island of Comoro; hence the Jebal-el-Kamar, or mountain of Komr. The real derivation of the term mountains of the moon is said to be still unknown; recent investigators trace it to a local or African word.[1]

Sir Thomas Roe, sent on a mission to India n the time of James the First, calls this small island north-east of Madagascar, Comoro, saying, "the inhabitants were of Arabian descent, and governed by a Sultana, an old woman." This was probably the island alluded to by the Arabian writers as being ruled by a female sovereign remarkable for the richness of her dress, being covered with gold and jewels.

The modern name of Madagascar was first given by Marco Polo, "an island so far south that no ship could go further in that direction on account of the currents, which ran so strong if a ship got into them they could not get back."

That the ideas of the Arabians about Komar, the Archipelago, and the Maharaja of Zabaj, were very confused will be seen on referring to their maps and writings, but there is nothing in them to indicate that their Komar had any reference to Southern India or Cape Comorin, a term derived from Kumara, a Hindu goddess. Edrisi and Abul Hassan Ibn Said, 1274 A.D., make Komar Malay an immense island, extending across the Indian Ocean from Sofala to Java, with two islands of Kalah, one in the Bay of Bengal and another near Sumatra. One or two Arabians do name a Serendib as forming part of the domains of the Raja of Zabaj; but it has been seen in Ch. II. that some of the mediæval geographers had an idea that there were two Ceylons. Al Biruni, A.D. 1030,

[1] Dr. Beke, Rep. Brit. Assoc., 1861, p. 185; 1863, p. 138; Gabriel's Edrisi, p. 31, quoted by Vincent, "Periplus," p. 452, Jaubert's Trans., i. 67, 79.

calls Sumatra Zabadge, Serendib, and Mas'udi also.[1] According to the latter, the Maharaja of Zabedj, or "king of the isles," possessed Zanig, Kalah, Serendib, and other islands in the archipelago opposite the kingdom of Komar, supposed to be Cambodia. Zabedj, which he defines as separating China from India, was probably Java. Albyrouni[2] says the islands of Zabedj were the same as those which the Sanskrit writers called Souvarna dwipa, or isles of gold.

In the romances of Sinbad mention is made of the Maharaja of Komar and the island of Cala or Kalah, and in the notes to Lane's edition it is clearly proved that Kalah could not have been in Ceylon. The editor also remarks, Komar can by no means be identified with Cape Comorin, as some European writers have done.

According to Abu-Zaid, the King of Komar's palace was situated a day's journey from the sea, on a river like the Euphrates, which seems to refer to one of the rivers of Siam or Cambodia, such as the Ma-king or Meinan. He also says, Komar produced aloe-wood, called "Houd-el-komari," which enables us to identify it as Siam or Cambodia, where *agila*, a highly perfumed wood used as incense from time immemorial in the East, is found in great perfection. It is thus rendered by the Abbé Renaudot: "Ce païs de Komar est celuy d'où on apporte le bois d'aloes appelé Houd-el-komari."[3] But M. Reinaud in his version makes it "aloes," or the substance used in medicine, which is quite a different thing. He also adds the following words, which are not in Renaudot: "Ce pays n'est pas une île, sa situation est sur le continent indien

[1] "Hæc terra regno Mahrag regis insularum, quæ sunt Zanig Kalah, Taprobana et aliae, opposita jacet regnum igitur Kumârense." Mas'udi in Gild. Scrip. Arab. p. 156. Meynard's translation of this passage is nearly the same. "Le Zabedj qui sépare la Chine de l'Inde, Maharaja Roi des îles Zabedj (Java), Kalah (Malaka), Serendib (Ceylon)," i. 163, 170. The words between brackets are the translator's.

[2] "Les îles du Zabedj, correspondant à celles que les écrivains Sanskrits nomment Souvarna doupia ou îles d'or."—Frag. Arab., p. 123; Tennent, i. 590.

[3] Anciennes Rela. des Ind., p. 78; Pinkerton, Eng. trans., vii; Reinaud's Voy. Arab., p. 97. A species of medicinal aloes named Kemare, grows near Cape Comorin; but this is not the real name of the drug in Arabic or Hindu, which is "Sabr."—Gladwin's Ayen. Akbery, ii. 104.

du côte qui fait face au pays des Arabes." Query, are they in the original MS. ?

"Nothing positive can be ascertained about the Maharaja of Zabedj. Marco Polo mentions a great potentate whom he calls King of Chamba, a place about 1,500 miles S.W. of Zayton. Chamba, called Jampa and Sanf by the Arabs, is the present Cambodia, part of Cochin-China. A powerful sovereign, claiming sovereignty over five subordinate kings, ruled in Jawa dwipa, 1294, of whom Friar Odoric speaks. Kubali made an attempt to conquer him, but was beaten with a loss of 3,000 men."[1]

The fabulous account of a naval expedition sent by Delak (a potentate whose dominions are said to have extended from Persia to Palestine), against Serendib and Kalah, related in the "Garsharsp Namah," a Persian poem of the eleventh century, is part of the evidence adduced by Sir E. Tennent in favour of Kalah being Galle. This expedition is described as occupying eighteen months from the commencement until it finally disembarked at the place of destination, and defeated Bahu, King of Ceylon, or Serendib Shah. The value of the evidence given by this romance will be best understood by giving Sir W. Ousley's account of it, from whom it was taken. He says: "The poem records an extraordinary naval expedition against the vassal King of Ceylon at the command of a powerful monarch, appearing, from certain coincidences . . . as a contemporary of Solomon, . . . his palace being at Jerusalem. It were vain to expect much chronological or geographical accuracy in such a romance. The first place where I find the general after leaving Jerusalem is Kalah."[2]

Abul Fazel, in his lists of longitudes and latitudes, calculated from the old meridian in the Fortunate Islands, makes the island of Kalah 140° east long. and 8° north lat., and the island of Maharaja 150° east long. and 1° north lat., far too east to have been anywhere near Ceylon; but the calculation is not accurate.

Colonel Yule, in his "Cathay," remarks, that "Sir E. Tennent was led into the error of placing Kalah in Ceylon from

[1] Col. Yule's Polo, ii. 218. [2] Sir W. Ousley's Travels, i. 50, 90.

relying too much on the arguments of M. Reinaud in his notes to the 'Voyages Arabes,' it being very difficult to make out where M. Reinaud really did mean to place Kalah, if on the Coromandel coast in Ceylon or at Kalliana near Bombay." The arguments of M. Maury, who places Kalah in Malay, will be found in the "Bulletin de la Société Géog." Paris, 1846, and those of Dulaurier, who adopts Reinaud's views, in the "Jour. Asiatique," 1846.

Length of their Voyages.—It seems the Chinese usually waited at an intermediate port on their voyages for a change of monsoons, in order to always have a fair wind, although the sails of their junks being very small in proportion to their size, the oars formed an important part in the locomotion and were much used.

Marco Polo says they had boats for towing the large junks, and also used oars when the wind was on the beam. Ibn Batuta makes the same remark, adding, that the rowers had a pleasant chant, singing "La la" to their work.

Junks leaving the Persian Gulf and descending the western coast of India with the N.E. monsoon appear to have spent the winter in the ports of Malabar or Southern India. Ibn Batuta was detained at Calicut for three months, spring being the time the junks made the voyage to China. The cabins were nearly all engaged by merchants who had come from China, as the shipowners let them for the out and home voyage, from which it appears "return tickets" are not a modern invention.[1] Calicut was full of passengers assembled there waiting for the departure of the junks. Ibn wanted a cabin for himself and his young female slaves, as he never travelled without them, but the only one vacant in the large junks was such a wretched place he was obliged to take a cabin in one of the small class of junks called a kaucam, in which he embarked his baggage and women some time before the fleet started, as it appears they all sailed the same day, but delayed embarking himself, staying on shore to say his prayers, it being Friday, until it was too late, as a heavy surf generally came on shore about four o'clock in the evening.

[1] Trad. Defremery, iv. 91.

Some kind of storm appears to have happened during the night, for in the morning one of the large junks was found wrecked on the coast, which was strewn with dead bodies and pieces of wreck. The Zamorin came down to the beach along with other people to see it. He was very scantily clothed, and had a boy slave holding a parasol over his head. Some of the persons in the junk were saved, among whom was a beautiful girl, whose master offered ten pieces of gold to the sailor from Ormus who rescued her from the waves; but he refused to take it, saying, he did it for the "love of God." The rest of the junks got off in safety; the kaucam in which Ibn Batuta's women and goods were following them, being afraid to come near the shore again, and he was left standing on the beach, where he passed the night, with nothing in the world but his carpet and a slave, who absconded when he saw his master's predicament. The carpet seems to have been a valuable one, as he sold it for ten pieces of gold in order to provide himself with means. This curious insight into the manners of those times is abridged from Defremery's translation of this very remarkable traveller.

Marco Polo says it took a whole year for a return voyage from Canton, going in winter and returning in summer, as in those seas there were only two winds, one the north-east, that carries them out, and one the south-west that brings them home. It is not clear from his statement how far the voyage extended, but it seems to have been only to the Archipelago, as he says he was detained in Sumatra five months by the weather.

Some details of their voyages are found in Chinese annals. In the Sung history it is stated Ta-shi (Arabia) lay north-west of the province of Tu-kien. It was forty days' sail from thence to Lan-li-po, supposed to be the Nicobars, where they passed the winter. The second year, the wind being favourable, they reached Ta-shi in sixty days."[1] M. Pauthier, in his notes to Marco Polo, gives a translation of a Chinese account of an expedition sent by Kubali to Southern India, in 1281, which occupied three moons, and from which it appears the

[1] Bretschneider.

expedition was bound to Kaulam, but when off the western coast of Ceylon, want of provisions and foul winds induced them to put into a port of Mabar.[1]

Many junks also traded with Eastern India. Ibn Batuta, after his mishap at Calicut, went to China from Bengal, the voyage to Sumatra occupying fifty days.

Chinese Accounts of Ceylon.—Many notices of the manners and habits of the Siṉhalese are found scattered among Chinese books and encyclopædias, called "Tsung-shoo," consisting of extracts from ancient authors, dating from the fifth to the eighteenth centuries. Some of them have been translated by MM. Rémusat, Klaproth, Landressi, Pauthier, and Julien, in various numbers of the "Journal Asiatique,"[2] and other publications. Not content with this information, Sir E. Tennent obtained more from Mr. Wylie, of Shanghai, and has inserted them in his work on Ceylon (i., 613). According to these, Chinese intercourse with the island was remarkably early and extensive, being coeval with the time of Buddha,[3] which seems very doubtful, as Ma-Touan-Lin says Ceylon was first known to the Chinese during the times of Tceu, A.D. 317 to 420, and mentions, as has been seen, the Veddah mode of trading. The Chinese appear to have been more familiar with the Siṉhalese than other strangers, on account of their being Buddhists, and were probably the first to penetrate into the interior, Fa-Hian having been at Anuradhapura in the fourth century.

Among the ancient customs remarked by the Chinese was that of the Siṉhalese women beating their breasts, while howling and weeping over the dead;[4] the burning of corpses;

[1] "Le commissaire envoyé pacificateur au royaume de Kiû-Lân la 18e année (1281); à la première lune ils s'embarquèrent à Thsion-tchéou (Fo-kien), naviguerent pendant trois lunes et atteignirent la montagne Sing-kia-ye (Adam's Peak); les hommes du navire Tching-tchin, et autres, par suite des vents contraires, et manquant de provisions, formèrent le projet de se rendre au royaume de Mà-pa-rh, quelques-uns leur ayant fait croire faussement qu'ils rencontreraient beaucoup d'obstacles dans leur navigation pour pénétrer jusqu'au royaume de Kiu-lán, ils suivirent cet avis. A la quatrième lune, ils arrivèrent au port du commerce nouvellement établi au royaume de Mà-pa-rh." P. 603.

[2] Vols. xxxv., xxi., xxix., years 1832, 1836.

[3] Wang-tu-yuen, p. 15; Jour. Asiat., 1836, p. 401.

[4] In the "Pa-hong-sec," composed by Lo-thse-yun, A.D. 1319, Jour. Asiat. 1836,

the long hair of the men; the female mode of arranging it; and the shaven heads of the children; their jewelled jackets and comboys, which they call a "kanman," made of "koo-pie" (cotton); the very strange dress of the kings and Kandyan chiefs, made in large folds, of a material called cloud cloth (stiffened muslin); and their earrings. The women did not eat along with their husbands, and both sexes chewed betel.

Whatever value may be attached to these translations, there is no confirmation in them, any more than in Arabian writers, that Ceylon was the great Chinese rendezvous Sir E. Tennent intimates.

Diplomatic Intercourse between Ceylon and China.—The first embassy from Ceylon to China occurred, according to Ma-Touan-Lin and Chinese annals, between the years A.D. 397 and 418, when a statue of Buddha, in Jade stone (a species of horn-blende), 4 feet high, and painted in five colours, was sent as a present to the Emperor Nyan-to. This was followed by an envoy from Raja Maha-Nama, A.D. 428, offering tribute. Kumara Das, A.D. 515, sent an embassy to China, stating he wished to go there himself, but was afraid of the sea.[1] The Emperor of China, Won-tu, sent an embassy to Ceylon to obtain information about Buddhist monasteries, with a view to regulating those in his dominions,[2] which were first established there A.D. 335. In A.D. 742, an embassy, accompanied by a present of large pearls, gold, ivory, and fine wool, was sent to China, and similar embassies followed in 746, 750, and 762, after which there appears to have been little intercourse until 1266. These embassies, undertaken by foreign merchants, were chiefly of a religious nature, the Chinese regarding Ceylon as their mother church. M. Pauthier, in his Polo (p. 585), quotes a passage from Ma-touan-lin which mentions some of the embassies just named, along with others from Kirte-Sen,

p. 54, this practice is stated to have taken place at marriages. "Si-lan. Quand on se marie les femmes des parents des époux se frappant la poitrine pleurent et poussent des cris pour les féliciter, les hommes coupent leur barbe et laissant croitre leurs cheveux ils enveloppent leur tête avec une pièce d'étoffe."

[1] Tennent, i. 387.

[2] Jour. Asiat., xxviii. 401; 1856, p 107; J. R. A. S. xix., 337; Cathay, i 312, intro., clxi.

A.D. 523 to 532, and Agrabodi, A.D. 729 to 769. M. Pauthier also says Ceylon is named in the list of ten kingdoms that paid tribute to Kubali Khan, in 1286. *Vide* ch. xii.

The introduction of Buddhism into China, soon after the Christian era, is stated by Du Halde to have arisen in consequence of a mysterious passage in "Confucius," which says the men of the west possess a "wise sage," supposed to refer to Christ, and the Emperor having a dream on the subject, envoys were sent in search of him, who, becoming acquainted on their mission with some of Buddha's followers in India, came to the conclusion, when they heard his doctrines, that Buddha was the "sage" they were in search of, and invited his priests to China, which happened in the year A.D. 64. Great doubts have been thrown on the authenticity of this version The Rev. S. Beal, in his translation of Fa-Hian, attributes the introduction of Buddhism into China to the "warlike expeditions of the Chinese against the Hioungnu." It is generally believed there is no passage in "Confucius" about a "holy man in the west," but it is found in a commentary on him by Lieh-tze. The messengers despatched by the Emperor Ming-Te, in consequence of his dream, returned with some of Buddha's sutras, and the "Lalita Vistara," which was translated into Chinese A.D. 76 by Imperial order.[1] In Colonel Yule's "Cathay" there is an account taken from Chinese annals of an embassy that was sent in the year A.D. 65 to Northern India, to obtain information about Buddha, possibly the one alluded to by Du Halde.

Fa-Hian, the Buddhist monk who visited Ceylon in search of sacred books, gives a long account of the religious ceremonies, temples, the Bo tree and chief town, which contained 6000 monks, who were maintained at the king's expense; he was told there were 60,000 of them in the island, who all ate in common. Buddha's tooth was carried in procession on an elephant. He alludes to the Maldives, "dependencies of the great isle which produced fine pearls and gems in a province 10 li square." (*Vide* ch. xii.) The King claimed three out of every ten stones found. The climate was temperate, and

[1] Fa-Hian, intro. xxi. and p. 151.

the trees always green. People sowed when they liked, there being no fixed period. When Fo visited the country, he converted the demons that formerly inhabited it, and left one foot print on the mountain and another to the north of the Royal city, where there was a building named "mountain without fear." It is doubtful whether he was alluding to the Abhayagiri dagoba or the hill of Mihintala, about eight miles north-east of Anuradhapura. Further on he says Buddha's tooth was kept there. "The mountain of safety" is also alluded to as a resort of Kwan-yin, in the Chinese western paradise. (*Vide* ch. xxiii.)

The term "Abhayagiri" is said to mean, literally, mountain of safety, and, according to Sir E. Tennent, has a curious coincidence with the term applied by the people of Samothrace to the mounds erected by them to commemorate their preservation from the Cyanœan deluge.

Hwen-Thsang, in the seventh century, writing from Southern India, describes the island as being rich and fertile, having a warm climate, and a numerous population, the men being of small stature and dark complexion.

M. Pauthier, in his Polo, gives an extract from a modern Chinese geography by Sui, which accurately describes the arrival of the Portuguese in Ceylon, their subsequent expulsion by the Dutch (Ho-lain), and capture of the island by the British (Yung-ki-li).

CHAPTER XI.

ARABIAN AND PERSIAN ACCOUNTS.

Persian Influence in Ceylon.—Soon after the time of Cosmas, with the decline of the Roman Empire and the transfer of the seat of government from Rome to Constantinople, the Persians became predominant in the Indian seas, and were the chief traders to India and Ceylon,[1] where they settled in large numbers. The Ethiopians of Adule were probably the last subjects of the Roman Empire who traded in the island; when they withdrew, all intercourse between these places ceased, and the once celebrated port of Adule fell into decay.

The anecdote related by Sopater about the gold coin shows the rivalry which existed between the Persian merchants and the traders from the Red Sea. Through their competition, silk, which, in the reign of Aurelian, A.D. 270, Ammianus Marcellinus says was worth its weight in gold, was sold at a price which brought it within the reach of every one in the time of Julian, A.D. 378.[2]

The Persians not only monopolized the whole of the silk trade, but likewise supplied the inhabitants of Constantinople with all Indian commodities. Their success was partly owing to their position, as Cosmas says, in the first part of his Topography, that more silk was brought to Persia by land than sea, probably by the overland route, to Ormus, mentioned by Barboso.

Hanza d'Ispahan, in his Chronicles, written in the middle of the tenth century, says Chosroes Nourschirvan, the celebrated Persian monarch, invaded Ceylon in the year A.D. 650. There

[1] "A Ceylon et sur les côtes du Malabar le sceptre du commerce était entre les mains des Persans."—Reinaud, Mém. sur l'Inde, J. Asiatiq., 1839, 1863.

[2] His. Aug., xxiii. 6, 11, 187

is no notice of it to be found in the native annals, but they rarely allude to anything unconnected with Buddhism. Perhaps the romance of "Garsharsp Namah," already mentioned, was founded on this incident. M. Reinaud, in his "Mémoire sur l'Inde," adduces it as a proof that the Persians must have been powerful at sea, or they could not have undertaken such an expedition.[1]

In Sir Henry Elliot's "History of India," composed of a number of translations of Arabian and Persian authors, edited since his death by Professor Dowson, 1867, there is a version of Al-Biladuri, a Persian chronicler, who lived about A.D. 892. He records that "in the year A.D. 664, under the governorship of Muhammad, the king of the Isle of Rubies (a Persian name for Ceylon), sent a present to Hajjaj of certain Mahomedan girls who had been born in his country, the orphan daughters of merchants who had died there. The king hoped by this measure to ingratiate himself with Hajjaj, but the ship in which he had embarked these girls was attacked and taken by some barks (bawarij) belonging to the Meds of Debal. One of the women of the tribe of Yarbu exclaimed, 'O Hajjaj!' When this news reached Hajjaj he replied, 'I am there.' He then sent an ambassador to Dahir to demand their release, but Dahir replied, 'They are pirates; I have no authority.' Upon receiving this answer, Hajjaj invaded India." According to the "Tohfat-al-kiran," the girls were sent to Abdul Mallik, the khalif of Bagdad, who ordered Hajjaj, the famous and fanatical governor of Irak, to invade Sind, when he carried his ravages to the Indus.[2] M. Reinaud, in his "Mémoire sur l'Inde," had previously mentioned this event, giving a nearly similar version.

The Persians appear to have exercised some sort of authority in the island at this period. "The Harwansa," says Harita, "was governor of an island covered with gems, and renowned

[1] Ibn Haukal mentions that a Persian merchant of Bassora (355 of the Hegira) had 30,000,000 of francs fortune in ships which traded to China and Zanzibar.—J. Asiatiq., 1873, p. 575.

[2] From an account of the conquest of Sind.—J. A. S. Beng., 1838, p. 305; also Ferischata, ii. 402.

for beautiful women."[1] They very likely held a temporary sway in some of the seaports, and the natives seem to have dreaded the power of the khalif from the desire shown to conciliate him.

With the exception of an expedition fitted out by the khalif, Omar, in the year 16 of the Hegira (A.D. 638[2]), which plundered the coasts of the island, Ceylon escaped the destroying ravages inflicted by the Mahometans on the inhabitants of India, and many of the terrified worshippers of Seva took refuge in Ceylon when Mahomed overthrew their idol at Somnauth (A.D. 1025). Kazwini tells us, during the siege of this place, the Indian defenders fought till they were all killed, more than 50,000 being slain. It may not be uninteresting to mention, with reference to the absorption of gold in India, already alluded to, that "the enormous treasure found at Somnauth has been a theme of wonder for all who have written about it. Kazwini, among others, says the idols of gold and silver, set with jewels, were valued at twenty thousand thousand dinars."[3]

The Tree of Life.—About the eighth century a strange story was circulated all over India and the East that a wonderful herb or tree grew in Ceylon which gave immortality to those who ate any of it. So many of the Chinese emperors had been poisoned by the eunuchs of their palace, that the emperor of the day, when he heard of it, sent several envoys to Ceylon to obtain some, as a safeguard against his eunuch. It is unnecessary to add that the emperor was doomed to disappointment, as the tree was not to be found in the island.

The idea of this herb or medicine originated with Beyrovich, the physician of Cosroes, who said he discovered an account of it in the books of the Brahmins. Albertus Fabricius[4] alludes to this story, saying the book was called the testament of Houscheuk, an ancient king of Persia, and that the phy-

[1] Traduction Langlois, Reinaud, Mém., p. 228, Frag. Arab., pref. Al-Biladuri remarks that Ceylon was called the Isle of Rubies, on account of the beauty of the women.—Elliot, vol. i. p. 119.

[2] Reinaud, Mém. sur l'Inde, p. 270.

[3] Elliot, vol. i. p. 98.

[4] Bib. Grec., vii. 778, ed. MDCCC. ; M. Remusat, Nouv. Mélang. Asiat., i. 196 ; Contemporary Review, Oct. 1870.

sician of Nourscheirvan was sent by him to India for it. Matouan-lin, in his Chinese dictionary, also gives an account of a tree of life, *tseo-lae-lo*, which grew somewhere in India on the top of a desert mountain, guarded by serpents; and Ibn Batuta speaks of a wonderful tree that grew on Adam's Peak. (See p. 261).

Notices of Ceylon found in Arabian and Persian Writers.—Tabari (A.D. 838) appears to be the first of them who makes any allusion to the island, and he only mentions Adam's Peak, saying the whole world does not contain a mountain of greater size.[1]

Albateney, an Arabian geographer, A.D. 877, quoted by M. Reinaud in the introduction to "Aboulféda," speaks of "Le rubis rouge et la pierre qui est couleur de ciel."

Ibn Khordadba, or Abou'l Kasim, an Arabian geographer, who was director of the post and police in Dzebal Media, A.D. 894, composed a "Book of Routes," with notices of foreign commerce, in the year of the Hegira 272, translated by M. Meynard from the MS. in the Bodleian library, Oxford, in the "Journal Asiatique," 1865. A slightly different version from another MS. at Constantinople is given in Sir Henry Elliot's "History of India." It is almost impossible to make out some of the routes described in this Persian "Bradshaw." He says, "The produce of Ceylon comprised several kinds of aromatics and perfumes, rubies, diamonds, musk, cocoa-nuts, and emery used to try metals, crystal, elephants, and pearls. The average height of the elephants was nine 'coudes,' or feet, but some were found in the ghobbs ten or eleven coudes high." The finding of elephants in the ghobbs, rendered by M. Meynard as "spacious valleys extending towards the sea," does not agree with the interpretation of this word given in translations of other Arabian writers, where it is made an arm of the sea, or lagoon. In Sir Henry Elliot's translation it is rendered, "The elephants of Anab are ten or eleven cubits high."[2] Neither diamonds nor true musk are a produce of Ceylon, as stated by several Arabian writers (*vide* ch. v.), but emery is, and is also

[1] Sir W. Ousley's Travels, ii. 34.
[2] Vol. i. 13. *Vide* ch. iv.

found in several other parts of the world, although the Arabians believed it was almost peculiar to the island.[1]

It is remarkable, with reference to cinnamon not being anywhere mentioned as an early product of Ceylon, that Khordadba says, in another part of his book, that it was brought to Persia from Sila (Japan) Sprenger, in an account of Khordadba given in the "J A S Bengal," 1844, p. 523, makes him say the Jews brought the spice from China; and he quotes another Arabian MS. of the fourth century of the Hegira, probably taken from Biladuri's "Kitab-al-Boldan," in the British Museum, where the same statement is found.

Among the imports was rice from Sind, and the wines of Irak, for the use of the king. Ibn Khordadba tells us that Jewish merchants were the medium of communication between the traders of the East, as they spoke many languages—Persian, Roman, Arabic, and the Frankish dialects of Europe. They travelled all over the East, making their way even to China. He speaks of Adam's Peak in almost the same words as Edrisi.

Quoting Hwen Thsang, who never was in Ceylon, and could have known little about it, Sir E. Tennent says (ii. 434), "Between the seventh and twelfth centuries agriculture was so successful that Ceylon produced ample supplies for her teeming population. But there is little doubt rice was always imported. Edrisi, describing Djerbatan, near Sind, says, "It is fertile in rice and grains, which we are told go to provision the markets of Serendib" (i. 179).

Abu-Zaid and Soleyman.—A very interesting work on India and China of the ninth century is called the "Voyages of the Two Mahomedans." The first part is supposed to have been written by a merchant named Soleyman, or Sulaimain, in the year of the Hegira 237 (A.D. 859). The latter part, which is a sort of commentary on the first, is the work of Abu-Zaid-al-Hasan, of Siraf, a geographer, and contemporary of Mas'udi (about the year A.D. 916), whom he met at Bassora, and acknow-

[1] "Abou Selah, dans son His. des Monas. d'Egypte, ajoute qu'il n'y a dans tout l'univers que Nubia, et l'île de Serendib, où l'on trouve ce mineral."—Quatremère, Mém. sur l'Egypte, ii. 11.

ledges to have received some information from him. Judging from their writings, the obligation was mutual, as there are some passages in Mas'udi which appear to have been furnished by Abu-Zaid. Soleyman evidently visited Ceylon himself, but Abu-Zaid did not.

These travels were first published in 1718, under the title of "Anciennes Relations des Indes et de la Chine," by the Abbé Renaudot, a French version of the Arabic MS. then in the library of Colbert, which was collected by the Comte de Seignelay Great doubts were thrown on the veracity of the Abbé Renaudot when this work appeared, and he was supposed to have manufactured it himself. In 1811 M. Langles published the text, promising a translation, but he died before it was accomplished. It was then edited by M. Reinaud, 1845, as the "Voyages Arabes."

An English version will be found in Pinkerton's "Collection of Voyages," London, 1811, and a partial translation by Sir H. Elliot.

Soleyman "describes the sea of Herkend as surrounding Cape Comorin, the north-west of Ceylon and the Maldives, one thousand nine hundred small islands, close to each other, called Debadjat, governed by a woman; they were all inhabited, and full of cocoa-nut trees. Ambergris[1] was frequently thrown by the sea on their shores; this substance, it was supposed, grew at the bottom of the sea, as it resembled a plant, and the waves, when agitated by the wind, tore it up. Cowries (*Cyprea moneta*) were stored in magazines, and used as money by the inhabitants."[2]

He represents Serendib as one of the Maldives, and very large, containing the pearl fishery, and the mountain "Al-Rohan," upon which Adam fell; his footprint was on the rock which formed the summit. The island was governed by two

[1] Some naturalists think ambergris a vegetable substance swallowed by whales. Barbosa says it was formed from the droppings of birds, which whales swallowing and not being able to digest threw up again, becoming a brown substance in their stomachs. Ambergris is, however, generally supposed to be a morbid secretion formed in the intestines of whales; large masses of it are occasionally found in the Indian seas. Linschotten mentions a piece weighing 30 quintals, found in 1555 off Cape Comorin.

[2] *Vide* Appendix.

kings, and produced aloes, gold, rubies, hyacinths, pearls, and sanka, a valuable shell, used to make trumpets." Probably the modern chank (*Turbinella rapia*).

"On the death of the chief king of the island his body was placed on a carriage, so that the head hung over the back of the vehicle, and trained on the ground, the hair sweeping the dust; and as it was drawn along, a female with a broom swept dust over the body, crying out, 'Oh! men, behold the man who but yesterday was your king and master, and whose will was law, see to what he has come; he has bid farewell to the world, the angel of death has seized his soul; be not any longer seduced by the shadowy pleasures of life.' This ceremony lasted three days, when the corpse was consumed on a pyre of sandal, camphor, saffron, and aromatics, after which the ashes were scattered to the wind. The wives of the king sometimes threw themselves on the pyre, and were burnt along with his body; but this was not compulsory, resting with themselves."

By the chief king, Soleyman doubtless meant the Buddhist ruler of the island, yet the strange ceremony he describes is not to be found in the native annals. "Sutteę," so common in India, appears to have been rarely practised in Ceylon, being a Brahminical custom. Soleyman is the only traveller who alludes to it in the island. Mas'udi describes the funeral of Siṉhalese kings in almost the same words.[1]

The Mahometan term "Al-Rohan," first applied by Soleyman to Adam's Peak, is supposed to be derived from Rohana, the native name of the southern province. The term is also found in the Kashmir chronicle, which represents Meghavahana as marching up the mountain "Rohanan." This is all the information about the island given by Soleyman, the remainder being related by Abu-Zaid. He says, "Gems of a red, green, and yellow colour were obtained from 'the mountain of gems' rising over the island. The greater part of the stones found were brought up by the tide; the water carried them into caverns and grottoes, from which they were taken out, men being appointed to watch their collection.

[1] Gild., Scrip. Arab.

Sometimes they were dug from the earth, as in a mine; these had earthy matter attached to them." There is evidently some mistake here about the tide; he probably meant that the gems were carried down by the mountain torrents into caverns. Gems are rarely found now in the matrix.

"The king had frequent conventions of the learned doctors or head priests of religion to arrange and write down the lives of their prophets and precepts of the law."

"Formerly it was not rare," Abu-Zaid says, "in the island to see a native armed with a khandjar of keen edge walk into the middle of a crowd, and, seizing a merchant of wealthy appearance by the throat, hurry him off out of the town, and then propose to ransom his captive, liberating him when the money was paid. People were too much afraid to interfere, and the practice continued for a long time, until a king came to the throne who determined to put a stop to it, and gave permission to arrest them at all cost; but many Arabian merchants were killed in the encounters which took place before it was put an end to."

This statement seems quite at variance with the character of the Siṉhalese inhabiting the sea coasts at the present day Yet the Arabian merchants appear to have existed in some sort of insecurity at the time mentioned, as the stone monument referred to in ch. xviii. records that a Moor named Bakaya distinguished himself by obtaining security for them about the year 939 A.D. Abu-Zaid's account bears a strange resemblance to the practices of the modern Greeks, Spaniards, and Italians of carrying off rich people and then demanding ransom.

Abu-Zaid says, "There were numerous costly temples in the island, and an idol of pure gold, the size of which had been much exaggerated by mariners visiting the place." This was probably the great idol in the temple at Dondra mentioned by Ibn Batuta.

"There was a numerous colony of Jews in Serendib and persons of other religions, notably Manicheans, each sect being permitted to follow their own religion."

Abu-Zaid speaks of the "ghobbs," the agreeable time the

Arabian sailors passed in Ceylon, and the cheapness of provisions, "a whole sheep being bought for half a dirhem, and for the same sum as much toddy as several persons could drink." The inhabitants passed the greater part of their time in gambling and cock-fighting, which they carried to such a length that when they had no more money to lose they wagered the joints of their fingers, &c. (*vide* ch. xix.) "Great licentiousness prevailed among the natives, the women especially, who were under no restraint, and young persons were warned by the muftes of Sirat not to go there."

Mas'udi, author of the "Meadows of Gold," travelled in India between the years 912 and 916 A.D., and is supposed to have visited Ceylon, but it is doubtful if he ever was there, he only mentions the funeral ceremony of the kings. Some of the first chapters were translated by Sprenger in 1841, the part relating to India by Gildemeister, in his Script. Arabum. 1838, and the whole book into French by Barbier de Meynard, 1864.

Al-Istakhri, (950 A.D.) in his "Book of Climates" and Ibn-Hawkal (976 A.D.) both translated by Sir H. Elliot, merely mention the distance from India to Serendib.

Sinbad of the Sea—makes Ceylon the scene of some of his stories. He says he obtained a letter of introduction from the Khalif to the king of Serendib, and embarked in a ship at Bassora, in which there were many merchants. He describes the burial-ground of the elephants in the furthest depths of the forest, and turtle shells as big as islands. The Malabars were employed in irrigating their rice lands from tanks. This marvellous romancer says he lived in the time of Haroun-al-Raschid, but most of his stories are founded on the statements of other Arabians, as Abu-Zaid, Mas'udi, and Kazwini's "Book of Wonders," some of whom lived several centuries later than the Khalif (*Vide* Reinaud's "Introduction to Aboulféda.")

Abu-Abdallah-Mohamed, generally known as Edrisi, descended from an Arabian family settled in Spain who were Khalifs of Malaga in the early part of the ninth century, being transferred there from Cordova, composed a geography (1154 A.D.) for his patron Roger, king of Sicily. Edrisi

probably never travelled further than the Mediterranean, but some of his information was obtained from the reports of persons sent by Count Roger to different countries for this purpose. As far as Ceylon is concerned, his account is chiefly taken from the Arabians already mentioned. M. Jaubert translated the whole in 1838.

Edrisi says, "Serendib, a celebrated island in the sea of Herkend, contains the mountain upon which Adam descended, upon whom be peace. The peak is so elevated it can be seen by mariners several journeys distant. About the mark of Adam's foot there is always a luminous appearance like lightning. On the mountain are found aromatics, and the animal which gives musk, also the civitte. They cultivate rice, cocoa-nuts, and the sugar-cane. The rivers produce rock-crystal, and the shores magnificent pearls.

"The king lives at Aghna, where there is a castle and the seat of government. The king is a prince who loves justice and the interests of his subjects. He has sixteen Viziers, four being natives, four Mussulmen, four Christians, and four Jews. Learned persons are appointed to assist them in administering justice and writing the chronicles of the government. There is no prince in India so rich in pearls and precious stones. The Chinese come to trade in the island, and the wines of Fars and Irak are imported by the king, who buys them with his money and then sells them in his dominions; for he drinks wine and prohibits libertinism, which is quite the reverse of other kings in India, who allow debauchery but forbid wine. The king of Komar is the only exception, who forbids both. Serendib exports silk, precious stones, crystal, diamonds, and perfumes. It is only a short day's journey from the continent. Here one can buy a sheep for half a dirhem, and for the same sum enough of sweet wine prepared with cardamoms to regale an assembly."

Sir E. Tennent, referring to Edrisi, says (i. 437–449), "but the Arabian geographers mention that, in the twelfth century, wine, in defiance of the prohibition (by Buddha), was imported from Persia and drank by the Sinhalese after being flavoured with cardamom." This, it will be seen, is a misapprehension.

Edrisi does not say the wine that was imported was flavoured with cardamom. The "vin doux cuit avec du cardamome," as it is rendered by Jaubert in the passage Edrisi has taken from Abu-Zaid, was some preparation similar to that mentioned by Ibn Batuta, who says "the inhabitants of the Maldives drank "*il kurbani*," or the honey of the cocoa-nut made into spiced wine, as Dr. Lee translates (p. 182). Translators do not seem to have clearly understood the nature of the liquid called "*tari*" in Hindu and "*toddy*" by the Europeans, which flows from the flower buds of the palms when they are tapped. It is not obtained from the cocoa-nut, or any other part of the tree, but the bud. This liquid may have been flavoured with spices in those days, although it is not at present. When boiled it thickens into a kind of sugar, which is evidently what was meant by the Arabians, and not honey of bees, as M. Reinaud renders it in the following passage from Abu-Zaid, "Une liqueur cuit composée de miel d'abeille mêlé avec des grains de dâdy frais," which he says is a kind of barley (Voy. Arab. p. 55-129). The Abbé Renaudot makes it "leur boisson qui est faite de miel de palme cuit, et preparé avec le *tari* ou liqueur qui coule de l'arbre" (p. 104), translated word for word in the English version of Pinkerton (viii. 184.) It should be a liquor made of palm juice or *tari* boiled. Defremery in his Ibn Batuta has "ils boivent du miel de coco mélangé avec des aromates." (iv. 139.)

What Edrisi says about the importation of wines by the king of Serendib is only copied from Khordadba, with seemingly fabulous additions of his own about "retailing them to his subjects," &c. There is no mention of wine in any other account of Ceylon until the time of the Portuguese, when a description of the liquid is given in the "Rajavali," which shows that Siṉhalese of the sixteenth century were unacquainted with the appearance of red wine at least, and most of the Persian wines are of that colour (*Vide* ch. xiii.)

It is not improbable the Arabians were referring to some kind of alcohol similar to arrack of whose exact nature and mode of preparation they were ignorant (*Vide* ch. xxii.)

Rashid-Uddin, historian of the Tartar kings of Persia, was

an Arabian in the service of Abaka Khan (1247 to 1310 A.D.), the events of whose reign he records. He also compiled a work on geography, founded chiefly on that of Al-Biruni (970 to 1039 A.D.) His history was translated by M. Quatremère in 1836, and his geography by Sir H. Elliot (i. 45).

Rashid-Uddin's account of Ceylon shows a more than usual amount of ignorance about it, and appears to have fallen into the common error of having two islands, in which he was probably copying Al-Biruni. Colonel Yule has noticed this, saying there are two articles: here, as in Kazwini, he seems to distinguish between "Sailan and Sarandip" . . . . . the application of the term Judi to Adam's Peak is curious . . . . . as Judi is the ark mountain of the Mahometans, it looks as if Rashid-Uddin held the same tradition." (J. R. A. S., 1870.)

Rashid-Uddin says, "from Mabar to Chin there are two roads, one leading by the sea to Chin and Mahachin, passing by the island of Silan, which is four parasangs long and four wide. It is parallel to the equator."

In a separate passage he says, "Sarandip is at the foot of the Judi mountain; the men are all Buddhists and bow to images . . . . . Sarandip, in the language of Hind, means the sleeping place of the lion, because its appearance is like a lion in repose . . . . . The whole of the country is exactly under the line. Rubies and other precious stones are found here. In the forests there are wolves and elephants, and even the rukh is said to be there. Beyond it lies the country of Sumutra."

It is hardly necessary to say there are no wolves in Ceylon. The rukh is a fabulous bird of more than gigantic proportions, well known to readers of oriental romance through Sinbad's adventures, and is also mentioned by Eastern travellers. "The fables connected with it are as old and widely spread as that of the male and female islands; and, just as in that case, one accidental circumstance or another would give it a local habitation, now here and now there. Marco Polo places it in Madagascar, where it was for some time localised."

The tradition of the rukh, like that of the gigantic turtle described by Pliny, Sinbad, and others, was doubtless owing

to the discovery of some great fossil egg, similar to those of the *Æpyornis* found in Madagascar, where not only the eggs but the skeletons of this antediluvian bird have been discovered. An engraving from a Persian drawing is given in Lane's "Sinbad," which represents a rukh flying away with three elephants in its claws as if they were so many rats, which gives a better idea of its supposed size than any description could do.

There is an egg of the *Æpyornis* in the British Museum, which would hold about two and a half gallons, and it has been calculated by naturalists that the principal quill feather in the wing could not have been less than ten feet long. The *Æpyornis* is supposed to be allied to the ostrich.

Friar Mauro says: the crew of the Indian vessel already alluded to (ch. vii.), on their return, touching at Madagascar, saw the egg of a bird the size of a wine barrel, and the bird itself could easily fly away with an elephant.

In the Hereford map of Haldingham, there is a drawing of a "gryphon," able to carry off a bullock. Another immense fossil wingless bird has been found in New Zealand, the Moa (*Dinornis giganteus*) which was ten feet high.[2]

Abdullah, called Wassaf, a Persian poet of Siraf, and contemporary of Rashid-Uddin, has written a series of poems, descriptive of different parts of the East, in the usual oriental strain of exaggeration. They have been rendered into German verse by Von Hammer Pugerstall, Vienna, with explanatory notes; and the part relating to India translated by Sir H. Elliot (iii. 27).

The following is an abridgment of Wassaf's lines on Ceylon and India: "When Adam was expelled from Paradise, God made a mountain of Ceylon the place of his descent,—a land distinguished from all parts of the world by its temperate climate, pure air, and water. As the sudden change from Paradise to a bad climate would have been the death of Adam, it was so arranged in order to break the force of a change from the best to the worst, and so assuage his fall. The charms of

[1] Yule's "Polo," ii. 350.

[2] Hochstetter, p. 182; Owen, Palæontology, p. 330.

this country, the softness of the air, the variety of its wealth in precious metals, gems, and other productions, are beyond description. The leaves, the barks, and the exudations of its trees, the grass, and the woods of that country, are cloves, spikenard, aloe wood, sandal, camphor, and fragrant mandel. White amber is the dregs of its sea, and its indigo and red bakam woods are cosmetics for the face. The thorns and wormwoods of its fields are regulators of the source of life, and useful electuaries in the art of healing for the throes of adverse fortune. Its icy water is a ball of muneya for the fractures of the world, and the benefits of its commerce display the peculiarities of alchemy. The hedges of its fields refresh the heart like the influence of the stars. The margins of its regions are bed-fellows of loveliness. Its myrobalums impart the blackness of youthful hair; and its peper-corns put the mole of the face of beauty on the fire of envy. Its rubies and cornelians are like the lips and cheeks of charming girls. Its treasures are like oceans full of polished gems. The trees are in continual verdure, and the zephyrs of its air are odoriferous. The various birds of its boughs are sweet singing parrots, and the pheasants of its gardens are like graceful peacocks."

Wassaf concludes by saying India must be a wonderful country, seeing that, in return for some comparatively worthless barks, spices, and essences, gold is continually flowing in but never leaves it.

Kazwini Zacharie-ben-Mohammed, an Arabian naturalist and geographer (1275 A.D.), has been called the oriental Pliny. The "Kitab-al-Jayb," or Book of Wonders, is his chief work. The part relating to India was translated by Gildemeister in his Script. Arabum (Bonn, 1838). There are some German versions of the whole, and a few extracts in the J. A. S. Bengal, 1844.

Kazwini has two Ceylons both the same size, one to the south of India, and the other half way between China and India, and confounds the products of Ceylon with those of the Archipelago.

Sir E. Tennent remarks "that Kazwini, in common with

the majority of the Arabians, omits all mention of cinnamon as a produce of Ceylon;" however he has named it, only he places the island which produces it in the Archipelago.

"First he says, Sarandib is an island in the sea of Herkend, at the extremity of India, eighty parasangs in extent, producing all kinds of aromatics and perfumes. Agallochum (aloe-wood), *nux indica* (cocoa-nuts), musk from deer and several kinds of hyacinths. It has gold and silver mines, and a pearl fishery."[1]

In a separate part, describing the Archipelago, he has, "Sailan is an extensive island situated between China and India, eighty parasangs in circumference. Sarandib contains many towns and villages, and has several kings possessing little power. From it are brought sandal-wood, spikenard, cinnamon, cloves, brazil-wood,[2] and various aromatics. It has also mines where gems are found, and abounds in every luxury."

In Quatremère's Memoir on Egypt and the Mamelouk Sultans, translated from Arabian MSS. at St. Germain, there is an account of an embassy which arrived at Cairo in the year 1304 A.D., during the reign of Melek Mansour Kelaown, one of the Mamelouk Sultans, from a Sovereign of Ceylon, named Abu-Nekbah-Lebabah, who also styled himself king of India. The object of the mission was to form commercial relations with the Sultan of Egypt. It contains almost the earliest mention to be found of cinnamon as a product of Ceylon, and seems to have escaped notice.

It says: "In the year 682 of the Hegira, there arrived at the court of Egypt an embassy from the Prince of Ceylon and king of India. The ambassador, named Al-hadj-Abou-Othman,

[1] "Sarandib insula in mari Harkand in extremis Indiæ finibus... eam octoginta parasangas... in hac insula omnis generis aromata, et adoramenta sunt et agallochum, nux indica, musci capreolus, plures hyacinthi, auri et argenti fodina, piscatus margaritarum." Kazwini, Opera, Gild. Scrip. Arab., p. 198.—"Sailan ampla insula est Sinas inter et Indiam, ambitus octoginta parasangarum. Sarandib in ea interiore est. Multos vicos et urbes habet et reges plures, nemini obedientes. Mari circa eam nomen maris Salahath est. Veniunt inde res miræ, etiam santalem, spicanardi, cinnamomum, caryophyllum, bresillum, et alia aromata, quibus prae ceteris terris excellit, etiam gemmarum fodinas habere dicitur, et omnibus bonis abundare." Kazwini, Opera, Gild. Script. Arab., p. 203. Tennent, i. 599.

[2] *Cæsalpinia Sappan.*

was accompanied by several persons. According to their statements they embarked in a Ceylon vessel, and after having touched at this island they arrived at the port of Ormus, proceeding by the Euphrates to Bagdad, and thence to Cairo. A letter from the king was presented to the Sultan, enclosed in a golden box, enveloped in a stuff resembling the bark of a tree The letter was also written in indigenous characters upon the bark of a tree. As no person in Cairo could read the writing, the ambassador explained its contents verbally, saying his master possessed a prodigious quantity of pearls, for the fishery formed part of his dominions, also precious stones of all sorts, ships, elephants, muslins and other stuffs, bakam wood, cinnamon, and all the commodities of trade which the Sultan obtained from the Banian merchants."[1] The ambassador also stated that his master had received an envoy from the Prince of Yemen, proposing an alliance, but he had rejected his overtures on account of the Sultan.

The embassy is stated to have been well received by the Sultan of Cairo, and dismissed with a letter for the king; but nothing appears to have resulted from the mission.

It is quite evident that it was not Báhu III., the Buddhist king of Ceylon at that time, who sent the envoy; he must have proceeded either from the Tamil Raja of Jaffna, or, what is more probable, from some of the Pandyan or Arabian rulers of Mabar. One of them, Marco Polo says, named Sondir-Bandi-Davar, owned the pearl fishery to the north of Ceylon (1292 A.D.). None of their names are at all like that given in Quatremère, which however is thoroughly Moorish, and might be found in Ceylon at the present day among them.

[1] "L'an 682 de l'hégira on vit arriver à la cour d'Egypte une ambassade du prince de Ceylon, roi de l'Inde. Le député, qui se nommait Al-hadj Abou-Othman, étoit accompagné de plusieurs personnes. Suivant ce qu'ils racontèrent ils étoient embarqués par ordre de leur prince sur un vaisseau de Ceylon, et, après avoir touché à cette île ils étoient venus aborder au port d'Ormus. . . . La lettre étoit enfermée dans une boîte d'or, et enveloppée d'une étoffe qui ressembloit au touz (l'écorce d'arbre). La lettre du Roi étoit écrite en caractères indigènes sur l écorce d'arbre. . . . . Je possède une quantité prodigieuse de perles et de pierreries de toute espèce. J'ai des vaisseaux, des éléphants, des mousselines et autres étoffes, du bois de bakam, de la cannelle, et tous les objets de commerce qui vous sont apportés par les marchands Banians." Mém. sur l'Egypte, ii. 284; Sultan Mamlouk, p. 60.

All the information to be obtained about the rulers of this part of southern India is very obscure. According to Marco Polo, there appear to have been five kings, own brothers, rulers of Mabar. Wassaf says the Dewar, or king of Mabar, whom he calls "Lord of the Empire," a few years since was Sunder-pandi, which bears some resemblance to Marco Polo's Sendeman or Sendernay, whom he calls king of Ceylon, and may have ruled in the northern part. Several members of an Arab family bearing the surname of Al-Thaibi appear, Col. Yule says, "to have been powerful on the coasts of the Indian Sea at this time. One of them named Malik-ul-islam was ruler of Ormus. Another had the horse trade with India in his hands, and was a semi-independent prince of the islands in the Persian Gulf."

M. Langles, in his translation of Thunberg, Paris, 1796, mentions two more Arabians, Bagacey and Ibn-el-Vardi (1348 A.D.), whose accounts of Serendib are similar to those already quoted.

CHAPTER XII.

ACCOUNTS OF MEDIÆVAL TRAVELLERS.

Marco Polo.—It is not known whether this prince of travellers visited Ceylon on his way home, or during the time he was in the service of the khan of China. From some Chinese annals quoted by M. Pauthier, it would not appear improbable that he formed part of one of the expeditions sent by Kubali to exact submission in the Archipelago, Southern India, and Ceylon, from the years 1279 to 1286, when ambassadors were sent to Kubali bringing tribute from ten kingdoms,[1] consisting of productions of these places, which do not appear to have been very valuable, if we are to judge from the presents mentioned by De Mailla. (*Vide* ch. x.) As far as Ceylon is concerned, Chinese vanity seems to have exaggerated, as Marco Polo says, "the Sinhalese were at that time tributary to nobody."

Marco does not say where he landed, but from his mentioning sesamum or gingele oil, chiefly grown about Jaffna, and omitting that of cocoa-nut, produced in much greater quantities in the south, together with his description of the low shore, it seems likely that he only visited the northern parts of the island; and this would account for omitting to mention cinnamon as a product of Ceylon.

The following is abridged from Colonel Yule's edition of 1870:—About the year 1260 two brothers, Venetian mer-

[1] "En 1282 à la deuxième lune l'envoyé atteignit le Royaume de Kiulan; le chef de ce Royaume, avec son premier ministre Ma-ho-ma et autres, allèrent au-devant pour rendre hommage. En 1286 tous les Royaumes qui étaient venus faire leur soumission à la Cour Mongol étaient au nombre de dix, Má-pa-rh, Sing-ki-le, etc., tous envoyèrent des ambassadeurs avec des tributes consistant en productions du pays."—P. 604.

chants, named Nicolo and Maffeo Polo, had a house of business in Constantinople and the Crimea, from whence they travelled across Asia to the great khan on the borders of Cathay. They were well received by Kubali, curious to learn all about the "West;" and, after a time, sent back by him with letters for the Pope, requesting his Holiness to send some missionaries to civilise his subjects. On the brothers' return to Venice, Nicolo found that his wife, whom he had left behind, was dead; but his son Marco, our traveller, born in 1254, had grown a fine youth fifteen years of age. An interregnum in the Papacy at this time prevented the brothers from obtaining the missionaries desired by Kubali when they returned to him in 1271, but were accompanied by young Polo, who was soon taken into the service of the khan, and sent by him as commissioner in different parts of his dominions, delighting the khan on his return by his lively accounts of the strange countries ruled by Kubali.

M. Pauthier has found a record in the Chinese annals of the Mongol dynasty, which states that, in 1277, young Polo was nominated a second class commissioner attached to the privy council.

In 1292 the three Polos sailed from Zayton in charge of a Chinese princess betrothed to the king of Persia, eventually reaching Venice in 1295. Marco was made prisoner by the Genoese in 1298, at the naval battle of Curzola. While prisoner, his travels were taken down from his recitals by Rusticiano of Pisa. He was liberated at the treaty of peace between Venice and Genoa, 1299, and died at Venice about the year 1324.

He says, "The island of Sielan is in good sooth the best island of its size in the world. You must know that it has a circumference of 2,400 miles; but in old times it was greater, for it then had a circuit of 3,600 miles, as you find in the charts; but the north wind blew so strong on the shore, it swept away great part of it.

"The island is very low and flat on the north side, insomuch that in approaching on ship board from the high seas you do not see the land until you are right on it. They have a king whom they call Sendeman, and are tributary to nobody.

The people are idolators, and go quite naked, except that they cover the middle. They have no wheat, but rice and sesamum, of which they make their oil. They live on flesh and milk, and have tree-wine (toddy), and Brazil-wood (*Cæsalpinia Sappan*), much the best in the world. You must know that rubies are found in this island, and in no other country of the world but this: they find there also sapphires, topazes, and amethysts, and many other stones of value. Their king has a ruby a palm long; you must know that the great khan of China sent an embassy and begged the king as a favour greatly desired by him to sell him this ruby—offered, in fact, what the king would; but he replied, it belonged to his ancestors, and he could not part with it.

"The people of Sielan are no soldiers, but poor cowardly creatures, and when they have need of soldiers they employ Saracens. You must know that in this island there is an exceedingly high mountain: it rises right up so steep and precipitous that no one could ascend it, were it not that they have taken and fixed to it several great iron chains, so disposed that by the help of them men are able to mount to the top . . . and they say that on this mountain is the sepulchre of Adam, our first parent; at least, that is what the Saracens say; but the idolators, that it is the sepulchre of Sagamoni Borcan (Buddha), before whose time there were no idols; they believe him to have been the best of men—a saint, in fact, according to their fashion—and the first in whose name idols were made."

"The idolators come here on pilgrimages from long distances, and with great devotion; just as Christians go to the shrine of Messer Saint James, in Gallicia, and they say that the teeth, and hair, and dish that are there, are those of the king's son; but the Saracens, who also come here on pilgrimage in great numbers, that it is the sepulchre of Adam, and that the teeth, hair, and dish were his. However, according to Holy Scripture and our Church, the sepulchre of Adam is not there."

"The great khan was so anxious to get a hold of these relics that he dispatched a great embassy in the year 1284, travelling by sea and land until they arrived at Scilan, and

presented themselves before the king, and were so urgent that they succeeded in getting two of the grinder teeth, which were passing great and thick; and they also got some of the hair, and the dish from which that personage used to eat, which is of a beautiful green porphery; and when the khan's ambassadors got it they returned greatly rejoiced to China, when the khan ordered all the ecclesiastics to go forth to meet these relics, which he was told were those of Adam; and the whole population of Cambaluc joined in the procession, and carried them to the khan, who received them with great reverence; and they find it written in their scriptures that the virtue of that dish is such that, if food for one be put therein, it shall become enough for five men, and that the great khan had proved it himself by trial."

"So now you have heard how the great khan came by these relics; and a mighty great treasure it cost him." (*Vide* ch. xxiii.)

Marco was mistaken in supposing rubies were only found in Ceylon. It is not known what became of the wonderful gem possessed by the kings of Ceylon, which is alluded to in glowing terms by so many travellers till the arrival of the Portuguese, when all mention of it ceases. Fa-Hian, who is the first to speak of it, says the priests had a gem of great value, which was coveted by the king. M. Julien, in his version of this traveller, makes the gem "10 li carre," about the accuracy of which rendering there is some doubt. (*Vide* p. 272.) Hwen-Thsang relates that the ruby was on the top of a column or pagoda dedicated to Buddha, and of a clear calm night it could be seen 10,000 "li" off. From this description it would appear to have been a light enclosed in a red glass. Cosmas says it only glowed when the sun shone on it.

Sir E. Tennent quotes a Chinese work that was in his possession, which says, "Early in the fourteenth century the Emperor sent an officer to Ceylon to purchase a carbuncle of unusual lustre, that was fitted as a ball to the king's cap. It weighed upwards of an ounce, and was valued at 100,000 strings of cash. At the levées it was called the red palace illuminator, for its lustre filled the palace."

If this was the gem referred to by Marco it must have weighed considerably more than an ounce; he says it was "longo un palmo grosso come il braccio." Barboso mentions the small copper cash of the Chinese, strung on a string through a hole in the centre. If a string of them was worth 10*s*. the sum offered by Kubali would have been £50,000.

Friar Odoric also speaks of the khan's endeavours to obtain the gem, though by some mistake the circumstance is referred to Nicobar.

Andrea Corsali (1515 A.D.), who is the last traveller to mention it, says, "They tell that the king of this island possesses two great rubies of a colour so vivid that they look like a flame of fire." All this seems very marvellous, but ancient travellers were given to exaggeration. In like manner Benjamin of Tudela, the Jewish Rabbi, raves of the lustre of the diamonds of the emperor of Byzantium. Most probably the king of Ceylon's gem was only a carbuncle, which corresponds more to the flame-like appearance ascribed to it; or it may have been a zircon, a specimen of which has been lately purchased for the British Museum for £700, that is said to "glow like a fire." The latest notice to be found of the gem is in a Spanish history of the end of the sixteenth century, by Amaro Centeno,[1] who appears to have taken his account from Hayton, which will be found further on.

The king of Ceylon, when Marco Polo visited it, was Pandita Prakrama Báhu III., who reigned from 1267 to 1301, his capital being at Dambadenia, about fifty miles N.E. of Colombo. It is not known who the ruler was Marco names Sendeman, unless he was one of the Pandyans of Southern India, mentioned in the previous chapter.

Friar Odoric.—About thirty-five years after Marco Polo was in Ceylon, another Italian visited the island, named Odoric of Portenau, in Friule, a Minorite friar, who set out on his travels in 1318 A.D. Passing from the Black Sea, he traversed

[1] "El Rey desta ysla tiene un rubi el mayor y mejor que hallarse puede, y quando se, à de coronar por Rey toma aquel rubi precioso en las manos, y acauallo ródea toda la ciudad entorno, y auiendo hecho esto le rinden obediencia todos, como á Rey y Señor natural."—Cosas d'Oriente, p. 4, Cordoua, 1595.

the Asian continent to Ormus, hence to Surat, Kaulam, Ceylon, Madras, Sumatra, and China, penetrating to Pekin; returning overland to Italy after an absence of twelve years. These extensive and dangerous journeys were undertaken from a religious motive, to convert the heathen, and are in many respects as interesting as those of Polo. He died in 1331 from the effects of his missionary labours. Odoric's travels were first published in Ramusio, 1563; an English version followed in Hakluyt's Collection of Voyages, 1599; and a new translation by Colonel Yule, with extensive notes, is given in his "Cathay."

Odoric says, "Sillan had a compass of 2,000 miles, and contained many serpents and wild animals, especially elephants, also bears and lions (panthers). In it was an exceeding high mountain, where Adam mourned for his son Abel one hundred years, and whose tears, joined to those of Eve, formed, it was said, a fountain or lake in the midst of the mountain, on a level part of it." But this the Friar thought was not true, as he saw the spring coming forth from the earth. "This lake contained jewels, and also abounded in bloodsuckers (leeches). The king permitted people to dive in it for the gems, but they were obliged previously to smear their bodies with lemon juice, which prevented the leeches biting them. The wild animals, although dangerous to natives, were harmless to strangers," and there was a bird, which he does not name, as large as a goose, that had two heads. Sir E. Tennent concludes he meant the hornbill, which has an immense casque on its beak. Colonel Yule suggests that it may have been the knobbed geese of Singapoor Odoric was allüding to.

Friar Hethoum.—There is a notice of Ceylon a few years prior to that of Odoric amongst the works of Friar Hayton, as he is sometimes called; he was a prince of Cilicia and cousin of the King of Armenia (circa 1295, 1307 A.D.), but, embracing a monastic life, became Prior of the Order of Premonters, at Poitiers. His accounts of the Tartars, Chinese, and other oriental countries which he had visited in his travels, were taken down in French by Nicholas Salcon (1307), by the order of Pope Clement V. The MS. is in Paris, No. 2810. There

are many foreign editions of this work, one being in the Recueil des Voy. curieux de P. Van der Bergeron, La Haye, 1735, where the old Norman French of the original is changed to the modern, some words being added and others left out. The MS., as quoted by M. Pauthier, says, "Towards the middle of the ocean there are many islands inhabited by Indians, who are all black, and quite naked in consequence of the heat, and adore idols. In these islands are found precious stones and good spices. Among them is an island named Celan, in which are found fine rubies and sapphires. The king of this island is the richest and greatest in the whole world, when he is crowned he holds a ruby in his hand."[1] In the edition of Bergeron "pearls and gold" are included among the products, and many drugs used in medicine, also "when the king was crowned he rode on a horse round the city, holding in his hands one of the finest rubies ever seen, when all acknowledged him as their Sovereign."

Jourdan de Séverac, Bishop of Kaulam, was a French Dominican Friar, and missionary in India and China. His "Mirabilia," or Book of Marvels, was first published in the Recueil des Voy. de la Soc. Géog. de Paris (vol. iv.), from the Latin "MS." of M. Walckenaer. A translation by Colonel Yule has been since published by the Hakluyt Society, 1863 Jourdan travelled through Persia to India about 1323, and does not mention having been in Ceylon, but says, "There is an island called Silen, producing the best precious stones in the world. Between the isle and the main land pearls were taken in wonderful quantities. The king of Sylen was very potent, possessing many fine gems, and two rubies which he weareth, one hung round his neck, and the other in the hand wherewith he wipeth his beard," etc.[2]

[1] Devers mydi, decoste cest royaume, est la mer occeane, et là sont isles assez. Et là habitent Yudieus qui sont tous noirs, et vont tous nus pour la chaleur; et aourent ydoles. En celles isles se treuvent pierres précieuses et les bonnes espices. Et là est une isle qui est nommée Celan et là sont trouvés les bons rubis, et les bons saphirs. Et le roi d'icelle a le plus riche et le plus graut qui soit en tout le monde Et quant le Seigneur est couronnez il porte celui rubis en sa main. Pauthier, Polo, p. 626; Bergeron, Recueil des Voy., ii. pa. 10.

[2] Col. Yule's "Jordanus," page 28.

He speaks of cinnamon as a produce of Southern India, "a large tree which had fruit and flowers like cloves."

Ibn Batuta.—In 1344 this very remarkable Mahometan traveller arrived in Ceylon on a pilgrimage to Adam's Peak. Abou Abdulah Mahomed, called the traveller *par excellence* of the Arab nation, was born at Tangiers, February 24, 1304. Having a passion for travelling, he began his wanderings in 1324 through the whole North of Africa. Visited Palestine, Syria, and Arabia, making a pilgrimage to Mecca; passing from the Persian Gulf he travelled through India, visiting the Maldives, Ceylon, Bengal, the Indian Archipelago, and China. Returning home still restless, he passed into Spain, and subsequently travelled to Central Africa, and ascended the Nile a considerable distance, remarking it was unlike all other rivers, for it ran from south to north. He died in 1377.

His travels were first printed by Scetzen, a German, in 1808, and a celebrated English version was made by Dr. Lee, in 1829, from an abridged MS. The complete work was only obtained after the French Conquest of Algeria, being found at Constantina, and translated into French by Defremery and Sanguenette, in 1853, with an account of the traveller's life; who appears to have possessed the art of making himself welcome wherever he went, and was rather given to the marvellous. Some of his accounts are very confused, and it is difficult to make out what he means; the MS. was made from notes and memory on his return home.

Our traveller left the Maldives[1] August 26, 1344. He says it was a three days' voyage from them to the Coromandel coast, but they were nine reaching Ceylon. They saw Adam's Peak some days before, "appearing like a column of smoke in the sky." The sailors informed him, on nearing the land, that the port in the vicinity was ruled by a pirate, and they were afraid to enter his domains; but a high wind coming on, Ibn insisted on being put on shore, preferring to encounter the pirate

[1] Sir E. Tennent says Ibn Batuta was on his way to the Coromandel coast, and reached Ceylon accidentally, but this does not appear quite clear from either Dr. Lee's or Defremery's versions. In a previous part of his narrative Ibn says he intended to visit Ceylon on his way to China.—Def. Tra. iv. 135.

rather than the dangers of the sea. Landing by himself, he was conducted by some natives on the coast to "Batthalah," supposed to be the modern Putlam, where he found the Pagan chief reigning, named Aryia Shakarte; a piratical potentate, who possessed a number of vessels, for Ibn Batuta saw a hundred of his ships afterwards in the Coromandel. Our traveller was well received and lodged by Aryia, who gave permission for the crew of Ibn's ship to land. "This chief spoke Persian, and had many fine pearls, as he owned the pearl fishery, and also showed his guest a saucer made of a ruby as large as the palm of his hand, in which he kept oil of aloes."

This chief may have been the Aryia Chakawate who carried off Buddha's tooth, about 1303, or a Pandyan freebooter. A personage of the same name is stated in Ceylon annals to have built forts at Colombo, Negumbo, and Chilaw, about 1371 A.D. (Rajav., p. 264). Sir E. Tennent supposes he was the Tamil chief of Jaffna.

"There were eight vessels in the port of Putlam belonging to the sultan of the country, preparing for a voyage to Yemen, in Arabia, and the Sinhalese tried, but failed, to get possession of them." It is not clear from Ibn's statement whether they had not been captured by Aryia. He says, "The shore where he landed was covered with cinnamon trees, brought down by the floods in the rivers, being thrown on it in heaps. The merchants of Malabar and Coromandel took them, merely making the Sultan a present of a few cloths for the permission." There seems to be some mistake here, as cinnamon could hardly have been found as he describes; for although it grows not far from Putlam, it is only plentiful much more south. Baldœus says in his time the spice did not grow further north than Chilaw. Ibn Batuta is the first traveller in Ceylon who mentions the cinnamon, but he is not the first to allude to it as a product of the island.[1] Besides the instances mentioned in the last chapter, John of Montecorvino, 1292 A.D., says "A great store of it was carried forth from the island hard by

[1] *Vide* Tennent, v. i.

Mabar," and it is also named in the Florence Mappe Monde (1417 A.D.).

On learning that the object of Ibn's visit to the island was to make a pilgrimage to Adam's Peak, "Aryia facilitated his journey by giving him a palanqueen and bearers, with an escort; and said the vessel in which he came should remain in safety, the captain agreeing to wait for his return. So after spending a few days with his host, our traveller started on his pilgrimage to the Peak, accompanied by four jogues (or fakirs), who annually conducted pilgrims to the foot-print, three Brahmins, and sixteen coolies, carrying provisions."[1]

"After crossing a river or estuary in a ferry-boat made of reeds, they came to Menar Mendelay, the extremity of Shakarte's dominions, where they were well received by the inhabitants, who feasted them on a young buffalo just caught, rice, fish, and fowl." This account is rather obscure, if Menar Mendelay was the present Minneri Mundel. They could hardly have started from Putlam, as Minneri is on the sea side of the neck of land that forms the estuary of Calpentyn, while Putlam is on the main land; besides Menar is said to have been at the end of Aryia's dominions, some distance from Putlam. It is possible that Calpentyn was the port ruled by the pirate, and would have been more accessible to vessels than Putlam. Dr. Lee's version says they proceeded to the port of Salawat (Chilaw). "From Menar they passed inland, and crossed extensive plains abounding in elephants, who did not molest foreign pilgrims in consequence of the influence over them of Abu-Abdallah, who first opened the road to the holy foot-print."

Ibn does not give the date when this occurred, but Gildemeister identifies him as "an Arabian who died in the year of the Hegira 331 (Sep. 14, 942)," which thus fixes the time when Mahometan pilgrimages to Ceylon began.[2] The marvellous story of Abdallah and the elephants Ibn gives in

[1] Defremery has "Entrepreneur des pélerinages," from which we may conclude they "got up pilgrimages or excursion tours" after the modern fashion, like Mr. Cook.

[2] "Si fides habenda est Ibn Bathuthae primus eo peregrinationem instituit Abu

another place (vol. ii. 80). This sheikh, and a party of thirty fakirs accompanying him, being in want of food in the jungle on their journey to the Peak, killed and ate part of an elephant, but Abdallah refused to partake of the unclean food. During the night a herd of elephants surprised and killed all the fakirs except the sheikh, whom one of the herd placed on his back with his trunk, and deposited him in safety at a village on the banks of a river called the river of bamboos, and ever after idolaters honoured Mussulmen."

The next place the pilgrims reached he calls Kunacar, which was the residence of the lawful sovereign, described as being situated between two mountains, and near a pool of water where precious stones of great value were found. Gems were embedded in a matrix of white stone with fissures, and cut out from it. There were three varieties, red, or rubies, yellow, topaze, and blue, the sapphire.

Close to the city was a mosque to Sheikh Othman, who was mutilated, having a leg and an arm cut off for killing a cow, an animal sacred to the Hindu.

"The king was called Kunar, or Konar, and rode in ceremonies on a white elephant, the only one our traveller had ever seen. The elephant's head was decorated with large gems—seven precious stones as big as hens' eggs. The king's father had been deprived of his sight by his nobles, and the son put in his place."

Sir E. Tennent says Kunacar from the description must have been Gampola, which Colonel Yule thinks a mistake, and it was more likely meant for Kurnegalla, which was the capital from 1319 A.D. Turnour says Gampola was built for a new capital in 1347, which would have been three years after Ibn's arrival.[1] Kunar, the title given to the king, is the Sanskrit for prince.

Continuing his journey to the Peak, he mentions the fierce leech they "called a zalu, that remained in trees or grass, and when any one came near they sprang on them ; people squeezed

Abdallah ben khalif doctor inter cufios clarissimus, mortuus anno 331" (Sept. 14, 942). Gild. Scrip. Arab., p. 54.

[1] Turnour, Epitome.

lemon-juice over them, and the black monkeys with long tails, the males having white beards like men."

His description of the ascent of the Peak is very graphic and minute, but rather confused. He describes "a tree so situated that nobody could get at it, having leaves that never fell; but silly people said if one did fall and any person ate it they became young, however old they might be. Some credulous pilgrims stood gazing at it for hours, hoping to see a leaf fall.[1] Then there was a well with fish in it, which, however, no person attempted to catch, and flowers of various colour, also a red rose (rhododendron). Some thought they could read the name of Allah and his Prophet on them."

"The ancients had cut steps and fixed iron pins and ten chains in the rock for people to ascend. When mounting the last chain at the summit the frightful notion seized the pilgrims that they would fall, and in fear they recited their profession of belief, 'There is no God but God, and Mahomet is his Prophet.' The last chain was called from this circumstance the 'shahadat' or credo. There were two roads to the mountain, one called Baba and the other Mama, that is Adam and Eve."

"Pilgrims remained three days in a cave near the summit, visiting the foot-print every day before returning home. At the foot of the mountain there was a grotto where the Sheikh Abu Abdallah passed the winter." Dr. Lee makes it the tomb. "Ibn mentions in another part of his travels that he had seen the tomb of Abdallah in Persia. He descended by Ratnapura, and proceeded to Dinewar (Dondra), a large place on the sea inhabited by merchants, where there was a large temple containing an idol made of gold as large as a man, having two rubies for eyes, that looked, he was told, like lanterns at night. There were 1,000 Brahmins attached to the temple, and 500 girls, daughters of Indian chiefs, who danced and sang every night. The town and its revenues belonged to the temple."

Ptolemy's Dagana luna sacra, hence the Arabian Agna Dana Dinewar, and the modern Dondra, appears to have been always

[1] Dr. Lee calls the tree a cypress.

a place of importance and resort of pilgrims. It is doubtful if it ever was a Buddhist place of worship, even now pilgrims to Ramiseram pass on to the temple at Dondra, which is dedicated to Seva. The great building of which Ibn Batuta speaks was sacked and destroyed by Souza de Aronches, in 1587. It was then covered with plates of gilded brass, and contained 1,000 statues.[1] The ruins of the ancient temple still encumber the ground, among which are many finely-cut granite pillars and carved stones. Dondra is a fine headland covered with cocoa-nut trees, and the most southern point in Ceylon, usually the first land made by vessels coming *viâ* the Cape. Here the Buddhists made one of their dagobas, repaired in 686 A.D. by King Dapolo.[2]

Sir E. Tennent suggests that Ptolemy's Dagana was probably derived from Dagoba; another very likely derivation would be from the worship of the sun or fire. There are several Sanskrit words for a sacrificial fire which are almost identical with Ptolemy's term, such as dagdha agna and adhana. The name Agni constantly occurs in the "Vedas" as the god of fire, celestial light, and dawn; and it is not improbable that the sun was originally worshipped in the island.[3]

"Kali (Galle), the next town Ibn came to, six parasangs from Dinewar, was a small place, where he says the captain of the ship *Ibraham* entertained him for the night." However, there appears to be some error here, for he mentions subsequently that the captain of the ship *Ibraham* waited for him at Putlam, and this seems to have been the vessel that brought him from the Maldives. "From Kali he proceeded to Kalambo (Colombo), the largest and finest town in Serendib, which was the abode of the Wazer, or Vizer of the sea, named Jalastie, who had a guard of 500 Abyssinians." Wazer is a title equivalent to an admiral.[4] Ibn does not say whose admiral he was, but probably he had set up on his own account as a buccaneer, and seems to have been the "Coya Jaan" who three years later robbed Marignolli of the Khan's pre-

[1] *Vide* ch. xiii.; Asia. Res., v. vi.
[2] Rajavali, p. 248.
[3] Williams's Dict., p. 5.
[4] Cathay.

sents. Khwaja Jahan was Wazer of Delhi, and Batuta tells us the new Sultan of Mabar ordered his Wazer and Admiral to take the title of Khwaja Jahan also; probably Jalastie followed the same fashion.

"After remaining three days at Colombo, Ibn arrived at Putlam, where he found the ship *Ibraham* waiting for him, and sailed to Mabar, where he was wrecked."

Marignolli.—The travels of Giovanni de Marignolli, a Minorite Friar and Legate of Clement VI., were found, Colonel Yule says, "like fossils in a mud bank," embedded in an old Bohemian chronicle, first printed by Dobner of Prague, 1764. Marignolli was born about the year 1290, a native of Florence or its vicinity, and of good family: a street in that city bears their name.

He was sent by Clement VI., accompanied by several persons with a letter to the Khan of China, in answer to an embassy which arrived at Avignon in 1338 from that potentate. Marignolli and his companions left Constantinople May 1339, passing overland to Pekin, where they arrived June 1342, returning *viâ* Zayton to Quillon in Malabar, Dec. 1346 or 1347, from which place he sailed about the end of 1348 for the Coromandel coast, and appears to have been accidentally driven by the winds on Ceylon; but how he left the island and reached Europe he does not mention, except in once alluding to Ormus.

Marignolli's recollections of travel, written late in life long after his return home, are a collection of unconnected observations, some of them being very accurate accounts of the things he had seen, while others are equally unintelligible; for instance, his description of the island and Queen of Saba, or Sheba, and her elephants, which he appears to have reached somehow while on his voyage to St. Thomas. His Sheba has been supposed by some to mean Java, others the Maldives, but he was more probably alluding to the Queen of the Wanney. (*Vide* chap. ii.).

"Perviles" where he landed would appear, from the expression "over against Paradise," to have been somewhere on the south-west coast near Adam's Peak; Colonel Yule thinks it

was Barbyrin or Bentotte, Beruwala, its ancient name, resembling it. Pliny mentions a Perimulæ, one of the emporiums of India (vi. 23); and there is a Peruvili south-west of Cape Comorin mentioned in Taylor's Oriental MS., describing the Tamil country, quoted by M. Pauthier (p. 602).

The following remarks of Marignolli about Ceylon, which appear the most interesting, are taken from Colonel Yule's "Cathay." Marignolli and his embassy sailed from "Minebar," in Lower India, in a junk, apparently with the intention of visiting the shrine of St. Thomas near Madras; they soon encountered a storm, which carried them out of their course, for when it abated, he says, "they found themselves brought safely into harbour in a port of Seyllen called Perviles over against Paradise;" here a certain tyrant named Coya Jaan, an eunuch, had the mastery in opposition to the lawful king. He was "an accursed Saracen, who by means of his treasures had gained possession of the greater part of the kingdom. At first he pretended to treat them honourably, but, in the most polite manner, under the pretence of a loan, got possession of 60,000 marks' worth of presents from the Khan of China, which they were taking to his Holiness the Pope, consisting of gold, silver, silk, cloth of gold, precious stones, camphor, musk, myrrh, and aromatic spices; also detaining the Legate and his companions four months in the island."

Marignolli appears to have ascended the Peak during his stay. He says, "It hath a pinnacle of surpassing height, which, on account of clouds, could rarely be seen; but it lighted up one morning just before the sun rose, so that they beheld it glowing like the brightest flame; it was the highest mountain on the face of the earth; some thought Paradise existed there, but this was a mistake, as the name showed, being called by the natives Zindan-Baba; Baba was father, and Mama mother, while Zindan means hell, so that the term implied it was a hell compared to Paradise." Notwithstanding what he says here, he seems to have had an idea that Paradise was not very far off, saying in another place, "from Seyllen to Paradise, according to native tradition, is a distance of forty miles; the sound of the waters falling from the fountain of Paradise is heard

there." Marignolli doubtless derived this story along with many other of his statements from the Mahometans, although, from the way he relates them, they appear to be his own ideas. Zindan bears no resemblance to any other name applied to the Peak. Colonel Yule says Zindan in Persian means a dungeon.

"When Adam was expelled from Eden an angel took him by the arm and set him down on this mountain in Seyllen, and by chance Adam placed his right foot on the stone which still retains the impression; at the same time Eve was placed on another mountain four days' journey distant. After Adam was thus placed on the mountain he built himself a house made of slabs of marble merely laid one on another without mortar, and as the deluge never mounted so high, it was not disturbed. Although this was opposed to Scripture, they had some arguments on their side, being, they say, descended not from Cain and Seth but other sons of Adam." [1]

"The Buddhist priests on the mountain and elsewhere were very holy men, though they had not the faith, never ate flesh, and lived in sheds made of palm-leaves without fear of thieves; unless perhaps of vagabonds from foreign parts;" "they slept on the bare ground, and walked barefooted, carrying a staff, going out every morning to beg rice in the neighbourhood. He says they received him as if he was one of their own order, and were much respected by the nobles and people, living in strict poverty."

"On the mountain in the direction of Paradise there was a fountain which could be seen ten Italian miles distant; and though it came out there, its source was in Paradise, for leaves of unknown plants were found in it, also lign. aloes (aloe-wood), and gems, such as carbuncles and sapphires, and fruits with healing virtues. The gems were formed from Adam's tears, but this he thought a mere figment."

Adam had a garden in Seyllen containing plantain trees, "*ficus seu musarum*," called by the natives fig-trees. The garlands Adam and Eve wore were made from them, the leaves

[1] Arabian tradition asserts that after retiring to Serendib Adam and Eve had twenty sons, and as many daughters. D'Herbelot, Bib. p. 467—788.

being so large. New-born children, after being washed and salted were wrapped up in plantain-leaves along with aloes and roses, and then laid on the sand. If the fruit of the plantain be sliced across, he says you will find on both sides of the cut the figure of a man crucified, as if graven with a needle."

He mentions that oil, sugar, and wine were made from the cocoa-nut, which he calls "nargil;" also remarked the size of the jak fruit, "chake barake;" and speaks of vines that had leaves but no fruit, while a vinery at St. Thomas, Madras, produced wine. Thought the fruit Adam ate was a citron, not an apple. "He saw no camels, but innumerable elephants in Seyllen, who, though ferocious, seldom hurt any person; he rode on one that belonged to the Queen of Saba, who seemed to have the use of reason."

"Cain was a vagabond who wandered about the earth, and was thought to have built Cotta,[1] in Seyllen. The Veddahs were descended from him; their faces were hideous and frightful, and their wives equally ugly. They were wanderers, who could never stay two days in one place. Arguing from them he thought St. Augustin was wrong in saying none escaped the flood."

It is a Mahometan tradition that Adam and Eve arrayed themselves in plantain leaves, which from their size seem better suited for a covering than fig leaves, as rendered in Gen. (ii. 7). There appears to have been a confusion of ideas on this point among ancient writers, the fig and plantain being confounded with each other; and in some languages the plantain is called a fig. There are a few fibrous lines visible when a banana is cut across which a lively imagination may think has the appearance of a cross. Gerarde says, "The cross I might perceive; but the man I leave to be sought for by other and better eyes than mine." The cross on the banana is alluded to by Paludanus in his "Notes to Linschotten's Voyages;" he says, "Indian figges are called by Brocardus Paradise apples, and by Oniedus, in the 'History of India,' plantanus. This fruit when cut in the middle have certain veins like a cross,

[1] Cotta is derived from the Sanskrit "Kota," a fort.

whereupon the Christians of Syria do make many speculations" (p. 99). Padre F. Vincenzio Maria says that the appearance on this fruit in India was only a cross, but in Phœnicia there was an image.[1]

Children are not treated in the strange fashion described by Marignolli in Ceylon at present. There is an allusion to the salting of infants in Ezekiel (xvi. 4). Marignolli is the first traveller who mentions oil made from coco-nuts. "Chake barake," his term for the jak fruit, like most of his names for things, is from the Mahometans. Ibn Batuta calls it "shake barke," and Linschotten "iaqua," from the Malabar "jaca." (*Vide* ch. xxxiv.)

Johannes de Hese.—Was a priest of Utrecht, who travelled in the East at the end of the fourteenth century; it is doubtful that he visited India. His work is entitled "Joannes de Hesius itinerarium seu peregrinationem suam Jerosolymitanam per Arabiam Indiam Æthiopiam aliasque remotas mundi regiones, anno. DCCCLXXXIX." (A.D. 1389). Little appears to be known about this author. The best account of Hese is given by Santarem in his "Cosmography" (i. 163). His book was first printed at Cologne, in 1477, in Latin; other editions followed, one of the latest being that of Daventrie. 1505, quoted here. The old-fashioned types used in printing render it rather difficult to make out, and the work is very puzzling from the way in which it is put together.

Hese's book contains the first printed instance of the term Tabrobane being applied to Sumatra, having two Taprobanes, one in the Archipelago, "India Orientalis." In the following imperfect translation of a passage,[2] we can only guess at the

[1] "Nel mezzo tiene certe vene vgualmente spartite ehe formano una croce, nella Fenicia donc parimente si troua però più piccolo riene quasi espressa l'imagine de crocisisso," p. 375.

[2] "Insula . . . Caphane vel taprobane gemis et elephatib referta . . . etias grisam argera insulas auro argeto refertas fecudas, sunt etia vites in arborib . . . folia nunqr eadut hy etia india flunios nobilissios gange indiu hijppane regiocs indieas illustrates, est at india fauoni vento saluberrima, in ano bis fruges, nutrit gigin tineti coloris homies, elephates ingetes rynoceron bestia phitacu ane hebenu etia lignu, cynamomu, piper calamu aromatica mittit ebur lapides insnppeiosos berillos erisopzassos carbuculos adamantis margaritas vniones . . . nobiliu ardet abitio feian," p. 132.

meaning of some words, while others are quite unintelligible. Without doubt it refers to Ceylon, as it names cinnamon and pearls among the products; besides, the isle is named Caphane in the map of B. Sylvanus (A.D. 1511).

It says "The island of Caphane, formerly called Taprobane, is full of gems and elephants; the silver isles contain gold and silver; the trees are always green. In India there is a noble river called the Ganges, the hippopotamus region of India. The winds are salubrious, and it has two harvests each year; it grows plants yielding dyeing colours, and has a breed of elephants and a beast called rhinoceros; also ebony, cinnamon, pepper, calamus, and ivory, beryls, topaze, carbuncles, adamants, and pearls."[1]

Sir E. Tennent, in quoting Hese, has overlooked this passage, and has inserted (in vol. i., 637) the following as referring to Ceylon, but it evidently refers to Sumatra, on account of the description it contains of the cannibal propensities of the inhabitants mentioned in chap. vii., where Friar Odoric says, "people were sold and killed there like hogs for food." The circumstance of the island being called Taprobane is no proof Ceylon was meant, for Sumatra was as often called Taprobane as the other. The word "tropopagite," which occurs in the Daventrie edition, is omitted in the extract, and the date made 1398 instead of 1389.

"Adsunt et in quâdam insulâ (tropopagite) nomini teprobranes viri crudelissimi et moribus asperi: permagnas habent aures, et illas plurimis gemmis ornare dicuntur. Hi carnes humanas prosummis deliciis comedunt."

On referring to the first edition of Hese (1477), which is one of the earliest books ever printed, the passages quoted here about Ceylon and Sumatra are not to be found in it, and appear to be an interpolation in the Daventrie edition; and also occur in the edition without date, said to be of 1490, in the British Museum Catalogue. Mr. Major says, "The travels of Di Conti contain the first printed instance of the application of the term Taprobane to Sumatra." The original

[1] Oudin, Scrip. Eccl., iii. 1240; Andreas Valerius, Bib. Belg., 515; Major, Ind. Fifteenth Cent., pref. lxii. The hippopotamus is not found in India.

of Poggio's "Varietate Fortunæ," which contains Di Conti's travels, is said not to be extant, the earliest to be found being the Portuguese version of Valentin Fernandez Alemas, printed at Lisbon, 1502, translated from Poggio's Latin, but whether from the MS. or a printed edition is not clear.

Sir J. Mandeville, who was a native of St. Alban's, started, we are told, on his travels (A.D. 1322), returning to England after an absence of thirty-four years. There is a monument to him at Liége, where he died in 1371. Some consider his book "the most unblushing volume of lies ever offered to the public."[1] Halliday, one of his editors, thinks "such sweeping conclusions wholly unjustifiable. Of no book, except Scripture, can more MSS. be found of the end of the fourteenth and beginning of the fifteenth century, being undoubtedly the most popular work of the middle ages." It was first printed in French, at Lyons, 1480. His account of Ceylon seems to be taken from Odoric, but it is not clear how Mandeville could ever have seen Friar Odoric's MS., as they both travelled about the same period, and Mandeville's MS. was probably in circulation in England and France before the other's, which was little known out of Italy. The Cotton MS., from which Halliday's edition of 1866 is taken, is dated A.D. 1400.

Like most mediæval travellers, Mandeville has two islands, Taprobane and Silha. The account of Silha is almost word for word that of Odoric, while that of Taprobane is limited to introducing Pliny's account of the Indian ants, who threw up gold from holes in the earth. (*Vide* ch. xxvi.)

At the end of the fifteenth and beginning of the sixteenth century the island was visited by several merchant travellers, chiefly Italians; they appear to have taken goods about with them, buying in one place, and selling in another. The first of them was Nicolo di Conti, a Venetian, who originally established himself at Damascus, and after living there some years, travelled to India and China. On his return home, he fell into the hands of the Mahometans in the Red Sea, and was forced to become a Mussulman at Cairo, to which he consented from fear for the safety of his wife and children, who accom-

[1] Cooley, quoted by Sir E. Tennent, v. ii.

panied him; but they all died subsequently in that city of the plague, when he returned to Venice in 1444. Nicolo obtained absolution for his apostacy from Pope Eugenius IV. on the condition of relating his travels and adventures to his holiness's secretary, Poggio Bracciolini, who took them down in Latin. This version was so scarce when Ramusio published his "Viaggia," 1550, he could not obtain a copy in Italy, and made his Italian version from the Portuguese of Valentin Fernandez. Poggio's "De Varietate Fortunæ" turned up afterwards in the Paris edition of the Abbé J. Olivia, 1723, from which Mr. Major made an English translation for the Hakluyt Society in 1857.[1]

Di Conti calls Ceylon "Zeilam, a very noble island, 3,000 miles in circumference, producing gems and cinnamon in great abundance: a tree having leaves very like those of laurel, only larger; the branches made the best cinnamon, that from the trunk being inferior; an oil was made from the berries good for ointments, and the wood, when peeled, was used as fuel. The island was formerly governed by Brahmins, and contained a large lake, in the middle of which was a city three miles in circumference."

Sir E. Tennent thought this an amplification of Poggio from Pliny's account of the lake Megisba, whom Poggio quotes in another place. He also says (i. 638), "The narrative of Di Conti, as it is found in Ramusio, contains a passage about fish, which is not found in Poggio." However, it is in the Latin version of the Abbé Olivia, and in a Spanish version published at Seville, 1503. Interpolations are not uncommon in accounts of old travellers, few editions and versions agreeing in all respects. In the passage in question, Di Conti mentions that "there was a river in anterior India, in the island of 'Sailana,' called Arotani, in which fish were so abundant they could be taken by the hand; but if anyone held them he was at once attacked by fever, which only ceased when it was let go." Poggio concluded Di Conti was alluding to electric eels, but there are none in Ceylon; it is more probable he was alluding to the travelling fish, which can be

[1] India, Fifteenth Cent.

easily caught in the hand when they leave the rivers, and the fever a fabulous addition.

Athanasius Nikitin, a Russian, whose travels (1470) are given in Major's "India, Fifteenth Century," speaks of Ceylon as a port of the Indian sea, "where, on a hill, was the tomb of Adam. Antimony, agate, crystal, and sumbada were found in the vicinity; also elephants and ostriches; the former were sold by size, and the latter by weight!"

Sumbada is stated in a note to be a kind of mastich; it sounds very like sumbul, the root of a species of angelica, a Russian medicine introduced into England in 1840; it is also brought from India and China, and resembles rhubarb.

Hieronimo di Santo Stefano, in some letters from India addressed to Messer Gio Jacobo, mariner, says, "We departed in another ship from Upper India, and in twenty-five days arrived at a large island called Ceylon, in which grows the cinnamon-tree, resembling laurel, even in the leaf. Here are also many gems, garnets, jacinths, cats'-eyes, &c., but not of good quality, for the fine ones grow in the mountains. We staid in the island only one day. The lord of the isle is an idolater, and so are his people. There are many trees of the sort which bear the Indian nut."[1]

Another Italian, called a "Gentleman of Florence" in Ramusio, who accompanied Vasco di Gama in his voyage to Calicut in 1498, says little more than to remark Ceylon must be the Taprobane about which Pliny wrote, and speaks of trees "che fanno la cánnella in molta perfettione."[1]

Andrea Corsali (1515), in two letters from Cochin, addressed to Julian de Medecis, mentions the pearls, gems, and cinnamon, "la buona cannella che non si troua in altre parti;" and also remarks Ceylon appeared to him to be the Taprobane, and not Sumatra, as so many said.[1]

Thome Lopez, a Portuguese, writing from India in 1502, describes Zeilam as a very large and rich island, 300 leagues in extent, and 150 leagues from the peninsula, with a great mountain, and producing cinnamon in abundance, the best to be found; gems, pearls, and very large elephants.

[1] Ramusio, Viagg. i., pp. 120, 202, 345, 131. Ed. 1554.

These statements about cinnamon show it was not so scarce as has been represented.[1]

Ludovico Barthema, or *Varthema*, was the next who visited the island, about 1506. His travels, dedicated to the Contessa D'Albi, were published at Venice, 1517; and subsequently, in Ramusio, with many other editions in various languages. An English translation, with extensive notes, was made, in 1863, by Rev. J. P. Badger, for the Hakluyt Society. Barthema landed at a port which he does not name, apparently on the north-western coast, crossing over from the peninsula. "There were four kings in the island, all at war with each other; but little blood was spilt in their contests, as the arms used were swords, and indifferent lances made of cane." Fire-arms appear to have been unknown among them. Barthema describes Adam's Peak as being very much nearer the coast than it really is; he was informed "people were allowed to search for gems in its vicinity on payment of five ducats, and giving up all the larger stones found as a royalty." Portions of land called a "Braza" or "Molan" were allotted to each "digger" to limit their claims, which seems to explain an ambiguous expression in Fa-hian, who, referring to gem-searching in Ceylon, speaks of "mo-ni 10 li square," which has been rendered a gem or carbuncle of that size in M. Julien's translation, which can hardly be the meaning, as a Chinese "li," according to Beal, is 1,898 English feet. The island produced the best fruit Barthema had ever seen—"artichokes better than ours, and oranges the best to be found anywhere." "Carzofoli megliori che li nostri, melangoli dolce li megliore credo che siano nel mondo." The reverend translator suggests (p. 189) "that Barthema mistook custard-apples for artichokes (*carzofoli*), as they resemble each other." Artichokes are not indigenous in Ceylon, and custard-apples (*Anona muricata*) are said to have been brought from the West Indies, in which case they could not have been growing in the island when Barthema was there. "There were many Moorish traders in the island, which was dependent on the King of Narsinga for its supplies of rice, this grain being imported

[1] *Vide* Tennent, ii. 6, and ch. xxx.

from the continent. There were great numbers of cinnamon-trees, but they were only cut and peeled once in three years."

After remaining a few days, Barthema and his companions, alarmed for the safety of their merchandize, appear to have left the island suddenly. The king sent a messenger, saying he wished to examine their goods, but a Moor cunningly advised them not to go near him, as "he would pay them after his fashion."

Odoardo, or *Duarte Barboso*, was a Portuguese captain, and cousin of Magellan, who accompanied the great navigator in the first circumnavigation of the globe (1519—1522) as far as the Archipelago, where he was treacherously killed by some natives. Barboso had previously visited India, the eastern coast of Africa, and the Archipelago. His account, named "Libro dell' Indie orientale sommario di tutti li regni," was printed in Ramusio, 1550, and is an admirable summary of all that was then known about India and the eastern islands, his book being a kind of commercial guide, with lists of prices. A more ample MS., in Spanish, named "Viage por Malabar y costos de Africa," A.D. 1512, of the Barcelona library, has been translated by the Hon. H. Stanley, for the Hakluyt Society, 1866. Another MS., in Portuguese, was published at Lisbon, 1812, by the Academia das Sciencias in the "Collecça de Noticias para a Historia das nações Ultramarinas."

There is some obscurity about the date of Barboso's MS. The Spanish version, although dated 1512, was not translated from the Portuguese until 1524, the original being probably written in 1514. Neither is it known exactly when Barboso was in India. According to some, he returned to Portugal in 1512. There is no allusion in his work to the Portuguese being in Ceylon, which he could not have failed to mention had they been in the island when he was in it. The Moors and Chetties appear to have formed the chief population of the seaports of Ceylon visited by Barboso, judging from his description, which does not apply to the Sinhalese, except their indifference to arms. They monopolized all the trade of the island, and even sought to derive a profit from their pilgrimages to Adam's Peak, "secretly taking money with them

to barter for gems on their way, coming from all parts to visit the footprint, saying Adam went from there to Heaven." He calls the shaddock, which resembles a very large lime, "Pomo d'Adamo." By some they are conjectured to have been the "forbidden fruit." Although he speaks of the quantity of fruit, they appear to have been chiefly oranges. Most of the fine fruits now growing in the island were introduced by the Dutch.

Barboso describes Ceylon as "a large and beautiful island, thirty-eight leagues from Cape Comorin. The Moors, Arabs, Persians, and Portuguese called it Ceylam, and the Indians Tenarisim [1]—a rich and luxurious land, inhabited by Gentiles, and ruled by a Gentile king. All the inhabitants were great merchants; they did not understand or possess arms, being given to trade and good living. Both Moors and Gentiles were well-made men, nearly white, rather tall, and inclined to corpulency. They went bare from the waist upwards, wearing silk and cotton caps on their heads, with large ear-rings reaching to their shoulders; they had many gold rings, and other jewellery. Numbers of Moors lived in the seaports, who came to the island on account of the great liberty they enjoyed, together with the luxuries and temperate climate, life being longer in Ceylon than in any part of India. There was a great deal of very good fruit—several kinds of oranges, both sweet and tart, some very large, and other fruits not found elsewhere. The trees were green all the year, and there was plenty of good living—flesh of different animals, and fish caught close to the island; but nearly all the rice, the principal food of the inhabitants, came from Coromandel, and an abundance of sugar and honey was brought from Bengal. The island produced the best cinnamon in the world, in great abundance. The king had it cut and peeled once a year, and then sold it to merchants, who went there to buy it. The king also caught elephants, and sold them to merchants from Malabar, Comorin, Narsinga, and other places. Good elephants were worth from 1,000 to 1,500 ducats. The gem-diggings were a monopoly of the king. The rubies were inferior to those of Pegu, but the

[1] Ylinarim in the Spanish version.

Moors had a way of improving them in a charcoal fire, where they were kept for several hours, which made them darker." (*Vide* ch. vi.).

"The king resided at Coimucho, a good port near a river much frequented every year by vessels from various places. There were also several other ports in the island, governed by the king's nephews. The imports were cotton cloths from Cambay, saffron, quicksilver, vermilion, rice, and gold and silver, which was highly valued. The exports were elephants, cinnamon, gems, and pearls."

Barboso calls the Paumban passage "Chilla, or Chylam," and says "many Malabar dhoneys were wrecked every year in passing through it. Close to the island there was a sand-bank, where pearls were found. The Moors came to deal in them from a city called Coel, belonging to the king of Caulam."[1]

Cæsar Frederick, a Venetian (1563), was the last of the travelling merchants of Italy who visited the island, having, he says, travelled for eighteen years in many countries wherein he had both good and ill success. His narrative was translated into English by Hickocke, entitled the "Voyages and Travels of M. Cæsar Frederick, a merchant of Venice, into the East Indies, and beyond the East Indies." Written at sea, in the *Hercules*, of London, March, 1588, and printed in Hakluyt Collection of Voyages, 1599. He crossed over from Cape Comorin and visited the pearl-fishery, where he found the divers were all Christians, under the care of the Friars of St. Vincent of Paul, and then proceeded to Colombo. He says, "Zielon is an island, in my judgement, a great deal bigger than Cyprus. On the side lying westward is the city of Columba, which is a hold of the Portugales, but without walls or enemies; it hath, towards the sea, a free-port. The lawful king of the island is in Columba, and is turned Christian. The king of the Gentiles is called Madoni, which hath two sons; the younger son usurped the kingdom, and became a great warrior."

Cæsar Frederick is the first traveller who describes the peeling of cinnamon, relating, "I was desirous to see how they

[1] From Ramusio, i. 347, ed. 1554.

gather the sinamon, because the time that I was there was the season which they gather it, in April. The Portugales were at war at the time with the king of Kandy, and the armies in the field. Although with great danger, I took a guide with mee, and went into a wood, three miles from the city, in which wood was a great store of sinamon growing together among other trees; they cut the bark off the tree round about, in length from knot to knot, and take it off with their hands, and the tree does not die, and against next year will have a new bark." He mentions that he sold, advantageously, in the island some rubies he had brought from Pegu.

Porcacchi, in his "Isolaria," 1590, says, "Ceylon, according to the calculations of the Moors, who had recently circumnavigated it, was 2,500 miles in circumference, and had anciently a great reputation for size, being supposed by Solinus to form another world at the antipodes."[1]

Porcacchi introduces Di Conti's account of Sumatra, which that traveller calls Taprobane, as referring to Ceylon, describing the inhabitants of part of the island called Batch as cannibals, who ate human flesh, and kept skulls as a valuable property, "he who possessed the most heads being considered the richest," and represents Ceylon as producing the famous fruit called the durian (*Durio zibethinus*),[2] which is peculiar to the Archipelago, and about the size and form of a large melon, containing esculent seeds resembling chestnuts, which are enveloped in a quantity of yellow pulp, and has a powerful and unpleasant odour, like cheese, or rotten apples, but highly prized by the natives. A species of durian is found wild in Ceylon, but not the edible fruit, which, however, is said to have been lately introduced.

Sir E. Tennent, in his description of Batticaloa (ii. 465),

[1] "Taprobana è isola del gran mare Indico, come dice Solino, ma tanto grande et amplia che gli antichi riputarono, ch'ella fosse un altro mondo, habitato da gli antipodi. Secondo il calcolo fatto da'mori, che modernamente l'hanno nauigata d'ogn' intorno 2,500 miglia."—L'Isole più Famose del Mondo. Tomaso Porcacchi, Venetia, 1590, i. 188.

[2] "Vi nasce anchora un frutto detto duriano verde et grande, come que cocomeri, che a Venetia son chiamati Angurie: in mezo del quale trouano dentro cinque frutti, quasi come melarance, ma un poco più lunghi."

alludes to Porcacchi, remarking, "he gives a strange account of the inhabitants of Batch, which, from the context, would appear to mean Batticaloa. He describes them as being perpetually at war with their neighbours, eating the flesh of their prisoners, and selling their scalps at high prices—'di maniera che volendo comprare alcuna mercantia danno due o più teste ill'incontro, secundo il valore e ch e ha più teste in casa é riputato il piu ricco.' This information he got from the Moors, but it applies with truth to no tribe in Ceylon."

Porcacchi must have taken this passage from Di Conti's travels, where a tribe of cannibals in Sumatra, who kept heads as a valuable property, are called Batch. Marco Polo also speaks of the Battas of the same island, "who lived like beasts, and ate human flesh," but the term in reality is as old as Ptolemy. (*Vide* ch. ix.)

Di Conti's description applies more properly to the Dyaks, or aborigines of Borneo, who still possess a love for human heads, which are dried and hung up in rows before their houses. They believe in a future state; the owner of a head will have the former possessor of it as a slave, and consequently never loses an opportunity of securing them, making war against other tribes for this purpose. Among them, also, a man cannot marry until he has become proprietor of some person's head

CHAPTER XIII.

MODERN HISTORY.

Arrival of the Portuguese.—The first appearance of the Portuguese in Ceylon appears to have been somehow accidental, although its proximity to the Indian peninsula should have been well known to them, as it was very accurately described by Thome Lopez in 1502, writing from Malabar.[1] Yet it is doubtful if their navigators were aware of its exact position, many of them evidently thought it lay more to the east. Pigafetta, lieutenant of Magellan in his voyage round the world, 1519, calls one of the Philippines Zeilon, but he may have been confounding it with Junk Ceylon. (*Vide* ch. ii.)

In a Portuguese map of 1501 the African continent is correctly delineated, but is very wild in the eastern seas; even many years later the curious map appended to Ribeyro gives Ceylon a square form, although De Barros had previously stated the island was of an oval shape.[2] The Moors, finding their trade between the Red Sea and the Archipelago by the old route cut off by the Portuguese cruisers on the Malabar coast, kept out to sea on their voyages between Aden and Sumatra, passing through the Maldives to escape their pur-

[1] "Que dalli a cento et sincoenta legoas está Ceilão."—Coll. de Noticias, iv. 197. Ioãs De Barros, and most of the Portuguese, call it the discovery of Ceylon. "Foram dar com as correntes na ilha Ceilão a que os antigos chamam Taprobana."—Deca., i. lib. x. 424. Antonio Galvano says, in the latter end of this year (1505) the Viceroy sent his son to the isle of Maldina, and with contrary weather he arrived at the islands anciently called Tragano, but by the Moors Ytternbenaro, and we call them Ceilan, when he went on shore and made peace with the people and came back to Cochin, sailing along the coast and fully discovering it.—Adm. Bethune, trans., p. 104.

[2] "A qual ilha he quasi em figura oval."—Deca., iii., ii. 104. An account of the Portuguese and Dutch authors quoted in these chapters will be found in the preface, p. iii.

suers. Hearing of this proceeding of the Moors, Francisco de Almeida, the Viceroy of India, sent his son Lourenco on a cruise with nine ships to intercept them; while thus engaged he was unexpectedly carried by the currents into the vicinity, it is said, of Galle in the year 1505, and entered the port, which was full of the Moorish ships he was in search of, laden with cinnamon and elephants. After a short stay Lourenco departed, the Moors making him a present in the king's name of 400 bahars of cinnamon to get rid of him.

According to De Barros, Lourenco at his departure erected a padrão, or stone pillar, on the shore, a custom of the Portuguese when they discovered countries; but no trace of it is to be found. They had at first contented themselves by setting up crosses, but finding these soon disappear, in the reign of King João they erected stone pillars fourteen hands high, sculptured with the royal arms of Portugal, and surmounted by a cross, and carried them about with them to be used when required.[1]

De Barros and all the Portuguese historians except Gaspar Correa, say Galle was the port Lourenco entered in 1505, but Correa, who was in India in 1512, and ought therefore to be well informed on this point, in his "Lendas" makes it Colombo. According to him "Lourenco was sent to cruise off the Maldives, but his pilot, not knowing the currents, after sailing about for eighteen days without seeing them, found himself off Ceylon. Seeking out the chief port, called Colombo, Dom Lourenco entered with his fleet, and found it full of ships and merchants from all parts."[2]

Correa's statement is confirmed by the "Rajavali," which, relating the arrival of the Portuguese in Colombo, speaks of them in a manner that would imply it was their first appearance in

[1] "Metteo hum padrão de pedra em hum penedo e nelle mandou esculpir humas letras come elle chegára alli, e descubríra aquella ilha."—Dec. i., x. 426; Major, Prince Henry.

[2] "Nauegarão dezoito dias sem verem as ilhas, e forão ter a Ceylão, onde os leuarão as agoas e por acerto forão tomar no principal porto da ilha chamado Colombo, onde entrou Dom Lourenço com sua armada, e sorgio onde estauão muytas naos . . . . que he grande mercadoria pera todo a parte."—"Lendas da India," i. 646

the island, only there is a discrepancy in the date, which may easily have arisen from their ignorance of our chronology; the date given by the "Rajavali" does not in reality agree with that of either the first or second appearance of the Portuguese in Ceylon.

The native chronicle gives an amusing account of the strangers to their shores, saying, "Now in the month of April of the Christian year of 1522 a ship from Portugal arrived at Colombo, and information was brought to the king. They are a very white and beautiful people, who wear hats and boots of iron, and never stop in one place, (and having seen them eating bread and drinking wine, and not knowing what it was, they added); they eat a sort of white stone and drink blood, give a gold coin for a fish or a lime, and have a kind of instrument that produces thunder and lightning, and a ball put into it would fly many miles, and then break a castle of marble or iron. The king, on hearing of their arrival, being very curious to see what they were like, disguised himself and came down to the harbour from Cotta, and being pleased with their appearance, returned to his palace and gave them an audience and presents."[1]

According to De Barros, either the Moors or Siṉhalese at Galle tried to mislead Lourenco by saying it was the residence of the chief king of the island, and conducted his lieutenant, Payo de Souza, to the court of a local ruler some way inland, who granted permission to erect a factory at Colombo. Ribeyro and others say it was the king of Cotta Dharma, Báhu IX., who gave the permission, but he omits to mention where he landed; on the whole it seems probable Colombo was the port entered on the occasion, and not Galle.

The nominal king of Ceylon at this time was Dharma, who held his court at Cotta, then a fortified place near Colombo; several other native princes disputed possession with him in different parts of the island, and civil war raged among them all, as described by Varthema, so that the Siṉhalese were in no position to resist the Portuguese, had they been inclined to make a permanent settlement; but they were too much occu-

[1] Upham's version, p. 278.

pied in defending themselves against the Venetians and Moors, who had hitherto monopolized the Eastern trade, and whose jealousy was roused by the arrival of Vasco da Gama in the Indian seas in 1498. The Cape of Good Hope had been previously passed by Bartholomew Dias de Novaes, who reached the Rio Infante, now River Brede, in 1486; but his crew mutinied, and he was compelled to return to Portugal. The stone pillar Novaes erected on the spot is said to be now standing there.[1]

In 1321 the Venetians endeavoured to excite a new crusade in order to wrest the trade of the Red Sea from the Sultans of Egypt, with whom they subsequently made a treaty of commerce, obtaining a share of the coveted trade, and did not scruple, in order to please the Mahometans, to entitle their treaties, "In the name of the Saviour and Mahomet."[2]

A Bull granting them exclusive privileges was obtained in 1340 from Pope Clement VI., and they solicited permission from the Sultan of Turkey to form commercial establishments at Tyre, Beyrout, and Acre, and made a fortified factory at Tabrez to secure the trade of the Persian Gulf. Venetian "argosies" supplied even England with Eastern commodities to the end of the sixteenth century, the last of them which traded there being wrecked at Southampton in 1587;[3] and so great was the power of Venice she defied the Pope's commands not to furnish arms to the infidels against the Christians, and held her own against the Empire, the kings of France and Aragon, and the whole of Italy, who combined to ruin her on account of her pride.

The Venetians, finding their rich commerce endangered by the discovery of the new route to India by the Cape, Portuguese fleets preventing Moorish ships entering the Red Sea,[4] they formed an alliance with Soleyman, the Emperor of Tur-

[1] "Apontamentos d'una Viagem de Lisboa à China," 1853, ii. 154.

[2] "Ils ne se faisaient pas scrupule de condescendre aux erreurs des infidèles, en intitulant leurs traités : Au nom du Seigneur et de Mahomed."—Daru, Hist. de Vénise, iii. 56, 86–7.

[3] Harris, Coll. Voy., i. 872.

[4] Barboso.

key, in order to preserve it; proposed at their cost to make a canal through the Isthmus of Suez, and joined the Moors of Cairo in inflaming the Soldan of Egypt, who, equally alarmed, threatened to demolish the Christian buildings in Jerusalem, and the convent of Saint Catharine on Mount Sinai, if the Pope and the Spaniards did not prevent the Portuguese from destroying the trade of the Red Sea. Friar Mauro, a Franciscan, and abbot of the convent of Sinai, was employed by the Soldan to convey a letter containing his complaints and threats to Pope Julian. The curious correspondence which followed is given by De Barros (Dec. i.), which ended in the Soldan being informed he might do his worst.[1]

The Moors also, who were settled in various parts of India, joined in the alliance, and a fierce war was waged against the new arrivals, two great fleets full of Mamelukes and Janisaries being sent from Suez, but they were both defeated near Diu by the Portuguese, who, after securing the first settlements at Goa and Cochin, turned their attention to their enemies in the Red Sea and Persian Gulf, under their great leader, Albuquerque, who directed the operations from 1510 to 1515, when he captured Ormus.

The Venetians, finding the war against the Portuguese was of no avail to preserve their commerce, eventually proposed to share it with them; the Portuguese, however, were too much enraged at their losses to agree to this, and Albuquerque, in revenge, formed the project of ruining Egypt by diverting the course of the Nile into the Red Sea,[2] but his death at Goa, Dec. 16, 1515, cut short the plan. His successors invaded Abyssinia, and carried the victorious Portuguese fleet through the Red Sea to Suez, 1540.

One cannot help admiring the great energy, courage, and resource displayed in these difficult enterprises carried on so far from home by the Portuguese, although they were conducted with an amount of cruelty and ferocity rarely equalled by civilized people; but the Moors were equally ferocious.

[1] "Que a sua tenção era distruir o Templo de Jerusalem e a casa de Santa Catherina de Monte Sinay."—Dec. i., viii. 183.

[2] Daru, iii. 87.—Vasco da Gama died at Cochin, Dec. 25, 1524.

Faria-y-Souza gives the inscription on the standard of Faticam, a Moor, which ran thus : " By the grace of God Lord of Sundiva, shedder of Christian blood, and destroyer of the Portuguese nation ;" and Zeen-ul-deen frequently ends his passages with the pious ejaculation, " The curse of God rest on them, may he consign them to destruction." He gives a long account of the horrible atrocities of the Portuguese, and their prisons at Goa, but admits the Moors first began the war, being enraged at the loss of their trade and the defection of the Zamorin of Calicut, who formed an alliance with the Portuguese, induced to join them from their representations that he would derive more profit by trading with them.[1]

The Portuguese compelled the Moorish and Indian vessels trading to the Red Sea to have a passport from them, for which a fee was paid, otherwise they were lawful prize, and Faria says they often maliciously wrote on them in Portuguese, which the Moors did not understand, " A wicked Moor owns this ship, let the first Portuguese captain make a prize of it." The Moors thus found their ships condemned without knowing why.[2]

The atrocities of the Portuguese are admitted and condemned by Faria, Giuseppe de St. Maria, Fra Paolino, and Maffei, who mentions, among other things, that Don Lourenco Almeida, son of the viceroy, having been killed in the naval engagement near Diu, his father afterwards ferociously massacred a number of Moors taken prisoners at the time. They also displayed a zeal for the conversion of the natives whereever they went rarely equalled ; instructions were given to De Souza and the friars to begin by preaching, and if that failed to proceed to the decision of the sword—no danger or difficulties daunted the friars, who were ever ready to sacrifice their lives in the pursuit of their object, and it is remarkable that the Portuguese, notwithstanding their cruelties, were eminently successful in converting the populations under their rule.

[1] Tohfut, pp. 79, 104, 105.

[2] Faria, iii. 155 ; Maffei, lib. iv. 77 ; ii. 29, 37 ; Giuseppe de St. Maria, Viaggia Roma, 1719.

Daru mentions, as a proof of the great trade of Venice, the number of sequins found throughout the East, and all the travellers of the period bear testimony to the riches and influence of the Moors in India.[1]

Although the result of this fierce struggle ended in the destruction of the trade between India and Europe *viâ* the Red Sea, and its transference to other hands by the Cape for more than three centuries, the recent opening of the Suez canal bids fair to re-establish the ancient route as the chief channel of communication between the West and India, to revive the trade of the Mediterranean and Levantine ports at the expense of England, and perhaps France, and will probably effect changes greater than can be foreseen. (*Vide* ch. xxxi.)

The traveller Varthema mentions that "the goods brought from India by the Venetians passed through twelve different hands before they reached the European consumer, thus considerably enhancing their price." They were first conveyed to Aden and Jeddha in large ships, then taken in smaller vessels to Suez, and hence to Cairo by caravans of camels—a three days' journey,—and from Cairo to Alexandria, where the Venetians and Genoese exported them to Europe.[2] Cosseir was another port of traffic in the Red Sea. H. de Santo Stefano describes a voyage from this place to India: "he embarked in a ship whose timbers were sewn together, and having rush mats for sails; in twenty-five days, stopping every evening, they arrived at Massawa, in Abyssinia, from hence to Aden occupied twenty-five days more, at Aden he embarked in another vessel, also sewn, but having cotton sails, and in twenty-five days, without seeing land, arrived in India."[3]

The Persian Gulf was also an important channel of communication, the majority of travellers to India and Ceylon coming

[1] "Estes Mouros são tão poderosos e ricos, que quasi são os que governão em todo Calicut."—P. Alvares de Cabral, Noticias, ii. 130.

[2] "Chegava ao Toro, ou a Suez, situados no ultimo seio deste mar. E daqui em cafilas per caminho de tres dias era levada á cidade do Cairo."—Barros, dec. i., iii. 178.

[3] Ramusio, Viagg., i. 313.

by this route. Newhoff, in 1612, says, "Before the Portuguese had discovered the passage by sea to the Indies, all Indian commodities were brought to Europe by way of Ormus and the Euphrates to Bassora, and thence on camels across the desert to Aleppo, a journey of forty days, thence to Tripoli three days more." The trade of the Persian Gulf suffered less from the discovery of the Cape route than the Red Sea.

Settlement of the Portuguese in Ceylon.—In 1517, the Portuguese being relieved from their enemies, Lopo Soarez de Albergaria was sent by the viceroy, with seventeen ships and more than 1000 men, to form a commercial establishment at Colombo, where he succeeded in obtaining permission to erect a fortified factory, by holding out the prospect of a rich trade, and offering to assist the king at Cotta against his rivals, urging also the performance of a promise made to Lourenco de Almeida in 1505.

The Sinhalese were always so indifferent as to who possessed their seaports, Soarez could have had little difficulty in inducing them to agree to his demands; but he was soon attacked by the Moors secretly encouraged by the king, who repented of his promise, and the Portuguese, hard pressed, were relieved just in time by reinforcements from Goa, when the king was forced by Lopo Soarez to conclude a treaty with him, by which he agreed to become an annual tributary of 300 bahars of cinnamon equal to 1200 cwt., twelve ruby and sapphire rings, and six elephants. The Portuguese undertaking in return to defend him against all his enemies. This treaty, "inscribed on leaves of hammered gold," being settled, Soarez returned to Malabar with the principal part of his force, leaving Juan de Silva in command with a garrison of two hundred men.

There is considerable confusion in the Portuguese accounts of these proceedings, several of their historians confounding them with the previous arrival of Lourenco. Some persons doubt the existence of the cinnamon treaty, and say, "the Portuguese would find some difficulty in producing the documents," perhaps they would from the nature of the material,

" escrito em folhas de ouro batido ;" however, De Barros gives it in extenso.[1]

Some sort of fort appears to have existed at Colombo when the Portuguese arrived, for Baldæus says Soarez intended to build one, but was surprised to find on landing fortifications made by the natives. In 1520, Lopo de Britto was sent from India with a number of workmen and materials, including pearl oyster shells to make mortar, in order to strengthen their new possession, and Gaspar Correa in his " Lendas " gives a drawing of the place, from which it appears to have been very much stronger than has been stated.[2]

De Britto was not long in his new fort when he was besieged by the inhabitants of Colombo aided by the Moors, who collected 20,000 men, roused by an unprovoked attack on the natives made by De Britto, to which he was instigated by his soldiers, who complained he did nothing to keep up their prestige. The siege lasted five months, when the invaders were again relieved by reinforcements from India. Soon after orders were sent from Goa to abandon the settlement, and the fortifications were partly demolished, when it was decided to remain.[3]

The details of the Portuguese wars in Ceylon are nearly as dreary and uninteresting as the native annals before their arrival; little mercy was shown, and every species of atrocity it is possible to imagine appears to have been committed on both sides, the Kandyans matching the Portuguese in cruelty, and exceeding them in perfidy. The war, if the operations can be dignified with the name, consisted of a succession of sanguinary and predatory forays into each other's domains,

[1] " Que el Rey era contente de se fazer Vassallo del Rey D. Manuel, com tributo em cada hum anno de trizentos bahares de canella, que do nosso pezo são mil e duzentos quintaes, e mais doze anneis de rubins e çafiras das que se tiram nas pedrêiras de Ceilão, e seis elefantes para o serviço da feitoria de Cochij, tudo pago ao capitão da fortaleza que alli estevesse, ou a quem o Governador da India mandasse. E que el Rey Manuel e seus sueeessores fossem obrigados de amparar e defender a elle Rey de seus imigos, como a vassallo seu, etc."—Dec. iii., ii. 120–8 ; " Lendas da India," ii. 540.

[2] Tennent, ii. 10 ; De Barros, dec. iii., ii. 129 ; Osorio, ii. 327.

[3] Faria, i. 281 ; Valentyn, v. 91 ; Osorio, ii. 327.

when no quarter was given, and neither age nor sex spared, and victories were estimated by the number of heads brought in, it being the usual practice to cut them off the slain.

Pirard de Laval, a Frenchman, who was forced to enter the Portuguese service as a soldier at Goa, and served in Ceylon, which he calls "la plus fertile et la plus belle partie du monde," speaks of the utter faithlessness and cruelty of the Kandyan kings and people, "who cut the noses off all the Portuguese who fell into their power. The Portuguese soldiers in their campaigns in the interior marched hatchet in hand, cutting their way through the jungles."[1] The native kings forbade the making of roads in their domains, and neither the Portuguese nor Dutch ever tried to make any. Knox describes the Kandyan mode of fighting, saying, "in their wars there is but little valour displayed, although they do accomplish many notable exploits; for all they do is by crafty stratagem, never meeting their enemies in the field—their usual practice being to waylay them, working behind trees and rocks."

A strange and horrible Kandyan mode of execution is depicted in Baldæus, persons were buried standing in the ground up to their heads or breasts, and then killed with wooden balls thrown at their heads, a species of human "nine pins." Both the Portuguese and Kandyans compelled women to pound their children in paddy pounders; and it appears to be doubtful which party can claim the honour of this invention.[2]

At the beginning of the struggle the weapons of the natives consisting of bad lances, bows and arrows, they were ill-fitted to contend with the invaders, who obtained easy victories; but as time went on, things changed, and towards the close of the Portuguese reign they were often defeated, and their historians say the island cost them more than all their other possessions in India.[3] Padre Vincenzio says, in common with the pirates

[1] Hist. des Voy., x. 273.
[2] Knox, p. 177, 46; Baldæus, iii. 669.
[3] De Couto, dec. v., i. 57.

of India, the natives' lances were made of areca wood, the point being hardened in the fire, as iron was scarce.[1]

One of the devices of the Siṉhalese in their early wars (mentioned by Ribeyro, p. 62), were sword-blades fixed on elephants' tusks, but they proved more destructive to friends than foes, for the elephants, frightened by the fire-balls of the Portuguese, turned on the natives, and dashed through them, slaying right and left.

It seems, from the description of a cannon in the "Rajavali," that the Siṉhalese were unacquainted with gunpowder or fire-arms before the arrival of the Portuguese; but they soon remedied their deficiency, showing great talent in the manufacture of these weapons. De Couto says, (Dec. v. 57) before the war ended they could produce 20,000 stand of arms, although when the Portuguese arrived they did not possess a single musket. Faria, E. Souza, Pirard, and Linschotten bear similar testimony. The latter remarks, "the Chingalas are very cunning workmen in all kinds of metals, they make the fairest barrels for pieces that may be seen in any place, which shine as bright as silver" (p. 25); and Knox mentions that excellent fowling pieces were made at Kandy (p. 59).

In 1534, a division arose in the Royal family. Wijayo Bahu, who succeeded the king reigning when the Portuguese arrived, intended to supplant his sons by one wife in favour of a son by another, which coming to the knowledge of the discarded sons they made war against their father, and with the assistance of a Moor, named Soleyman, had him assassinated.[2] The eldest brother named Bhuwaneka VII. was then made king of Cotta, and Maaya Dunnai, the youngest, established himself at Sitawacca, one of the most ancient towns in Ceylon—thirty miles east of Colombo, on a branch of the Kalany, subsequently destroyed by Azavedo.

Maaya Dunnai, a cruel and treacherous prince, and the chief mover in the murder of Wijayo, soon tried to supplant

[1] "Nell' isola de Zeilano, e li corsari dell' India, per penuria di ferro no v'aggiungono altra, punte che d'aguzarle, e farle passare per il fuoco."—Viaggia, p. 363; Pirard, ii. 88.

[2] Rajavali, pp. 281, 284–6.

his brother at Cotta, who obtained the assistance of the Portuguese. Maaya Dunnai succeeded in inducing the Zamorin of Calicut (1538) to lend his aid with 2000 men, and also formed an alliance with Markar, a powerful Moor of Cochin. Cotta, at that time a fortified place and the residence of the king, was again and again besieged by Dunnai; but each time he was driven off by the Portuguese, who, having the command of the sea, his Indian allies were of little use to him. "The ships of Markar being destroyed by their fleets on the coast, only a few Moslems escaping, who made their way to Ceylon, where the Rajah inhumanly and treacherously put them to death:"[1] according to De Couto, the mutilated heads of the Moors, the noses and lips being cut off, and fixed on arrows, were sent by Dunnai to the Portuguese General as a peace offering.

In 1540, the king of Cotta, Bhuwaneka VII., in order to interest the Portuguese in the fate of his grandson at his death, adopted the singular plan of sending an embassy to Lisbon with a statue of his grandson in gold, and a crown, requesting that the king of Portugal, John III., would crown him. Saloppy Arachy, the ambassador, arrived in safety at the Portuguese capital, where the child was willingly adopted by the king, and crowned and baptized in effigy, in the great hall of the Palace at Lisbon, 1541, under the name of Don Juan, the king placing the crown on the statue with his own hand.[2]

A treaty of alliance was also formed between them; the Portuguese stipulating that a party of Franciscans should be allowed to preach in his dominions. They accordingly embarked for Ceylon, when many Siṇhalese were baptized, including several headmen and the young king, who had just succeeded his grandfather, accidentally shot by a Portuguese gentleman about 1542.

The "Rajavali" says: "natives of all castes hastened to become converts for the sake of Portuguese gold, chiefly women, wives of barbers, chalias, and fishers, who went to live with the

[1] Tohfut, p. 144.

[2] De Couto, Dec. v. 475; Turnour, Epitome, p. 49.

strangers" (p. 289). The first converts were made along the south coast at Barbyrin and Galle, and the work of conversion continued during the whole Portuguese reign among the population of the coast; but they did not make much progress in the interior, many of the converts being massacred by the Kandyans during the wars. The resistance to the Portuguese was almost entirely confined to the natives of the interior, numbers of the lowland Sinhalese were employed by them as auxiliaries, under the name of Lascareens or Lascars.

At the death of Bhuwaneka, regarded by the Buddhist chronicle as a traitor to his country,[1] several chiefs claimed the throne, and a civil war raged among them, in addition to that against the Portuguese. Cotta, exposed to the continual attacks of Maaya Dunnai and his son Singha I., was dismantled by the Portuguese, 1563, when the king and his family went to reside in Colombo; on one occasion the garrison of Cotta was reduced to such straits the bodies of the killed were salted by the Portuguese commander for provisions.[2]

Among the numerous Portuguese adventurers who flocked to Ceylon at this time, was the poet Camoens, "to try," Faria says, "if he could advance his fortunes by the sword, which had been so little favoured by the pen." He afterwards went to Zofala, and thence returned to Lisbon, where he died of the plague in 1569. The ship in which he came brought orders from the king of Portugal to restore the plunder taken from the subjects of the king of Cotta, according to Faria, "no less tormented with the covetousness of the Portuguese than he had been before by the tyranny of Singha."

In 1547, Jaya Weira, Raja of Kandy, taking advantage of the zeal of the Portuguese for conversions, treacherously invited some missionaries into his dominions, the Portuguese concluding he wished to become an ally and adopt their faith;[3] but the party, accompanied by 120 soldiers, were waylaid and escaped with difficulty. Not taught prudence by this, they accepted a second invitation in 1550, given by Kumara Banda,

[1] Rajavali, p. 290. [2] Faria, ii. 248.
[3] De Couto, Dec. vi. 155.

son and successor of Jaya Weira, to a much larger party, who were allowed to get within three miles of Kandy, when they were surrounded and 700 of them killed, half being Europeans: the remainder, closely pursued, succeeding in reaching the coast.

Capture of Jaffna.—The Parawas of Cape Comorin, previously made Christians by the Portuguese missionaries, hearing in 1542 of Saint Francis Xavier at Goa, invited him to Tutocorin.[1] While there the fishermen of Manaar also invited him to Ceylon; but as he could not go himself he sent one of his disciples, when numbers of the inhabitants of Manaar embraced Christianity, but they were soon after cruelly extirpated by the Brahmin Raja of Jaffna, 600 of them being martyred,[2] which provoked the Portuguese to commence a holy war against him, and an expedition was sent from Malabar commanded by Don Constantine de Braganza, the Viceroy, accompanied by the bishop of Cochin, who granted a general absolution and plenary indulgence to all who fought in the war, 1554.

After a long siege, during which the Portuguese lost many distinguished chiefs, the town of Jaffna was carried by storm in 1560. According to De Couto, among the spoil taken on this occasion was an alleged tooth of Buddha found hidden in a Pagoda, the relic being removed to Goa and destroyed in the manner related in Ch. XXIII. One cannot understand how Buddha's tooth, an object so much venerated by the Sinhalese, was intrusted to the safe keeping of the Brahmins of Jaffna. Linschotten, who was at Goa in 1584, alludes to the circumstance, but says it "was taken from Adam's Peak, the Portuguese expecting to find great treasure there, but only got a little coffer set with stones, wherein lay an ape's tooth" (p. 81.)

The loss of his capital forced the Raja of Jaffna to make peace and pay them 80,000 cruzados.[3] In 1604 the Raja was again chastised for assisting the king of Kandy; and the

[1] Butler's "Lives of the Saints."

[2] J. R. A. S., iii. 400.

[3] De Couto, Dec. vii. 309; Faria, iii. 259, 302; a cruzado was worth 2s. 9d.

Portuguese, according to Faria, might have taken possession of his dominions, only they were not at that time in a position to do so, but it was subsequently accomplished in 1617, when the governor of Ceylon, Constantine de Saa, hearing that the Raja was corresponding with the king of Kandy, had him captured, and sent to Goa, where he was deposed and executed. Faria says: "his wife was baptized and afterwards led a life at Goa that may be an example to Christians, while the Raja's nephew and heir resigned the throne and became a Franciscan monk."

In 1571, Raja Singha I., said to be the youngest son of Maaya Dunnai, cleared his way to the throne of Sitawacca by the murder, according to the Portuguese, of his father and every member of his family he could find—not an unusual method with Indian Rajas; but there is considerable confusion in all the Portuguese accounts of Sinhalese kings, increased by the strange names they gave them, and they were so queerly connected it is difficult to make out their relationship. Both Baldæus and Linschottin say, Singha was a barber who drove the lawful king to Goa where he became a Christian.[1] One member of the royal family, some say Singha's eldest brother, escaped with his family to Manaar, where they obtained the protection of the Portuguese and became Christians, the father being named Don Philip, in honour of Philip II. of Spain, just come to the throne; while his daughter was christened Donna Catharina, a lady who is often mentioned in the turbulent times which followed.

Raja Singha, or "the lion," a title acquired from the courage he displayed while a youth when fighting beside his father, gradually made himself master of the whole interior of the island, subduing all opposition to his imperious will, and, collecting a numerous force, besieged Colombo, August, 1586; his army amounting, according to Faria, to 50,000 fighting men, 60,000 pioneers, 2,200 elephants, 40,000 oxen, one hundred and fifty pieces of cannon, and 500 boats, but all this must be a great exaggeration. Ribeyro gives a much truer estimate of 5,000 men.[2] The cannon Faria speaks of were probably what

[1] Trav., p. 24; Chur., Coll. Voy. iii. 668; Faria, iii. 32. [2] Ribeyro, p. 26.

are called "grass-hoppers," small things on legs, carrying a ball about one pound weight.

Singha tried to drain the lakes, but the Portuguese, commanded by Correa de Britto, held their own, and the Raja was eventually obliged to raise the siege and retire into the interior. The Portuguese having the command of the sea, availed themselves of it to ravage the coast, committing the greatest atrocities. At Barbyrin they cut women's hands and ears off to get at their bangles and rings, and committed still more frightful outrages at Colombo. Faria relates that "an 'Arache' who in a former siege had killed twenty-nine of their men, was run through with a spear by Emanuel Mexia, when another cut him open at the heart and drank his blood, such was the hatred they had towards him." De Couto also mentions the same hideous story.[1] Souza de Aronches, with a fleet from Goa, sacked and destroyed the great temple at Dondra Head, dividing the booty among his soldiers, and desecrated it in the eyes of the Brahmins by killing several cows in the most holy part. We are told by Portuguese writers that the temple of Tanaverem, as they call it, from a distance at sea looked like a city, being surrounded with chapels and cloisters, the whole comprising a league in circumference.[2]

Faria mentions a romantic case of the affection the Siṇhalese entertain for each other, which happened during this siege, "in one of the forays on the southern coast: a bride was carried off during the absence of her husband, who rushed on board the ship on which she was, just as they were sailing away, preferring to be a slave with her rather than live without her; which coming to the knowledge of Souza de Aronches, he gave them their liberty, which they rejected, desiring, from gratitude, to be his and die in his service. They lived afterwards in Colombo, where the man on several occasions served the Portuguese."

Raja Singha died in 1592, being, according to the Portuguese, one hundred and twenty years of age. Previous to his death he lost all the power he had usurped. A distant relation

[1] Dec. vii. 562; Faria, iii. 52.

[2] Faria, iii. 53. De Couto, Dec. vi. 665. (*Vide* cl. xii.)

of the Royal family, named Kunappo Bandar, a protégé of the Portuguese, whom they educated at Goa, where he embraced Christianity, and was named Don Juan after the victor of Lepanto, aided by his patrons, successfully revolted against Singha, who died soon after at Sitawacca from a wound in his foot caused by a thorn, "lamenting the loss of power he wielded in his youth."[1] Baldæus says he ran the thorn in his foot on purpose, and, refusing to have the wound dressed, died of gangrene.

At Singha's death the Portuguese had intended to place Don Philip, another of their protégés, on the vacant throne, and marry him to Donna Catharina; but Don Juan, quarrelling with the Portuguese on this account, had his rival poisoned: he then turned Buddhist, proclaiming that he possessed the "Dalada," by which he secured the support of the Buddhist priests; and, making war against his former friends, succeeded in driving them from the interior, and made himself King of Kandy under the title of Wimala Dharma.

At the time Don Juan revolted against the Portuguese, Pedro Lopez de Souza arrived at Colombo with a fleet, on his way from Malacca to Goa; and, representing there the dangerous state of affairs in Ceylon, was appointed to command an expedition to Kandy to depose Wimala, stipulating that Donna Catharina should be married to his nephew and made a vassal of Portugal. A Siṉhalese moodliar, called Janere, joined Lopez de Souza in his enterprise; but Don Juan broke up the alliance by a stratagem, sending Janere a letter containing allusions to a supposed plot between them, the bearer of the letter being instructed to let himself fall into the hands of Souza, who, when he read it, ran the moodliar through with his sword without waiting for an explanation. The Siṉhalese allies of Lopez were so enraged at this murder that they deserted, which led to the defeat and death of Lopez, and capture of Donna Catharina by Don Juan, who then married her. This is Ribeyro's version (p. 28); but Baldæus says Janere quarrelled with the Portuguese and wrote a letter to Don Juan offering to join him, which letter fell into the hands of Lopez.

[1] Rajavali.

The war which succeeded these events was carried on with an extra amount of atrocity and varied success by the Portuguese, who were at one time nearly driven from the island by the exasperated natives, many of the lowland Siṉhalese joining the Kandyans, for the first time, to expel them. Jerome Azavedo, the Portuguese general, sent from India, 1594, to re-establish their authority, amused his ferocious soldiers by feeding crocodiles with captured natives thrown alive into the river to be devoured while the soldiers were looking on, and children were impaled on the pike-heads of his men and hoisted into the air in derision.[1]

When Don Juan Dharmapala of Cotta died at Colombo in 1597, he willed his dominions to Philip II. of Spain, by which the Portuguese acquired the sovereignty of the island, except Jaffna, then in the power of the Malabars; and Philip II. was proclaimed, according to Faria, king of the whole. This led to the submission of the lowland chiefs, a convention being concluded by which "all the laws and rights of the Siṉhalese were recognised, and full liberty granted to Catholic priests and friars to preach where they pleased." The convention is given at full length by Ribeyro, with an account of the military system of the Portuguese, laws, taxes, &c.; also those of the natives.

The dominions and power of the King of Kandy were much reduced by this arrangement, being confined to the hill country, and, as he still remained hostile, two camps were established to keep him in check, one at Manicavare in the Four Corles and another at Saffragam in Oovah. The Portuguese garrisons amounted to 20,000 men, of whom only 1000 were Europeans.

The short peace which followed this convention led to the revival of the trade of the island, nearly destroyed during the previous commotions. Ribeyro says many Portuguese families settled in Ceylon, 900 noble families residing in Colombo; also 1500 families of merchants, civil officers, and employés. There were 260 families of Portuguese at Galle, and many at Jaffna; these were the three chief places in their dominions,

[1] Faria, iii. 300. Tohfut, p. 155.

Colombo being the principal seat of trade, where every year many vessels arrived from Persia, the Red Sea, Malabar, China, Bengal, and Europe. The exports were cinnamon, elephants, cardamoms, sappan, areca nuts, ebony, ivory, gems and pearls; also tobacco, silk, and cotton in small quantities. Money being scarce, trade was chiefly carried on by barter; and imports were paid in kind, while the natives were allowed to pay some of their taxes with betel leaves, considered a valuable commodity, and until lately formed a species of rude currency in the island. It is said that coca leaves pass as money in Peru.

There was so little coin to be had, the Portuguese introduced pagodas, pardaos, and larins to meet the wants of the community. Pardaos were equivalent to a Spanish real, and larins, a very singular species of ancient coin, supposed to have originated in Persia, formed of a piece of stout silver-wire bent in two and partly flattened at the bend by a stamp: sometimes they are shaped like a hook. (*Vide* ch. xxii.)

The Portuguese did little to develope the resources of the country, taking things as they found them, and adopted the arrangements of the kings of Cotta for cutting and peeling cinnamon, which was made a government monopoly, and from its profitableness called the "maha budda," or great revenue, 10,565 cwt. being exported annually, and all surplus supplies burnt. This spice, and thirty elephants caught and sold each year, formed the chief items of their revenue, along with a tax on salt and pepper. Padre Barretto says, elephants were worth a thousand crowns each, and brought three times that amount in India.[1] 6,000 boat-loads of areca nuts were exported every year. The Portuguese do not appear to have derived any revenue from them, although Ribeyro speaks of them as a monopoly of the king of Cotta (*vide* Preface). We have no means of knowing what the Portuguese derived from the pearl fishery. Padre Barretto mentions that they paid a tribute of one day's fishing to the Naique of Madura for permission to fish. (*Vide* ch. xxx.)

At this time the Portuguese power in India reached its

[1] Relation, part 2, 248, 270.

culminating point, to be followed by a rapid downfall. They were masters of the coast of Guinea, and commanded those of Arabia, Persia, and India, besides their settlements at Surat, Bombay, Calicut, Goa, Coulan, Cochin, Meliapoor, &c. They possessed Ceylon, the Moluccas, Malacca, and Macao in China, and had the trade of the East in their hands, which hitherto no European power had ventured to dispute with them. Of all their possessions in the eastern seas, it is said Ceylon was considered the most valuable. According to Friar Navarette, "the King of Spain used to say in all his orders, let all India be lost so Ceylon be saved, for the island is worth more than all we have in the East." Van Goen, the Dutch governor, found the same statement among the Portuguese official documents at Colombo.[1]

The Portuguese revenue of India has been estimated[2] at one million of crowns, yet the king got nothing out of it.

[1] Chur. Coll. Voy., i. 304; Valentyn, v. 174. [2] Moore, i. 292.

CHAPTER XIV.

MODERN HISTORY.

Arrival of the English in Indian Seas.—Thomas Stevens, who had been a student of New College, Oxford, and subsequently became a Jesuit or a monk of St. Paul, was the first Englishman who passed the Cape of Good Hope, sailing in a Portuguese vessel from Lisbon to Goa, August 4th, 1579. "The account which Stevens gave of the navigation seems to have influenced his countrymen in their endeavours to trade in the Indian seas,"[1] beginning at that time to turn their attention towards the Cape route. Stevens's voyage was printed in Hakluyt, entitled "A letter from Goa, the principal city of all the East Indies, by one Thos. Stevens, an Englishman, to his father, Mr. J. Stevens, anno Nov. 10, 1579."

A few years later, Ralph Fitch, a merchant, with three companions named Newbury, Leedes, and Storey, were commissioned by the Turkey Company of London to travel in India and the Archipelago. They went by way of Tripolis, Bassora, and Ormus, to Goa, where they were imprisoned as suspicious persons by the Portuguese, but released at the intercession of Stevens. They then proceeded to Bengal, and hence to Fatepoor, in the Punjab, where they separated, and Storey died, September, 1585. W. Leedes, who was a jeweller, entered into the service of the Raja Zelabdin; John Newbury, who had been in Ormus on a previous journey, travelled

[1] Moore's Coll. Voy., i. 337; also Hist. Gen. des Voy. tome i. Pirard, the French traveller, mentions seeing Stevens at Goa in 1608. Fitch's Trav. are in Hakluyt, ii. 250.

to Lahore, and subsequently became a monk at Goa; while Fitch wandered to Siam, and, returning from Malacca to Ceylon, landed at Colombo, March 5th, 1589,—the first Englishman who ever visited the island, unless we suppose Sighelmus did, who was sent by King Alfred, in 883, to India on a pilgrimage to the shrine of St. Thomas, and returned laden with spices, as related by William of Malmesbury (Book 2), but he makes no mention of Ceylon.

Fitch says, "Here we stayed five days to water: an island very fruitful and faire; but, by reason of continued wars with the king, all things are very dear and scarce, and the Portuguese, who have a fort at Colombo, provision themselves from Bengal. The king (Singha) besieged Colombo (1586) with 100,000 men, and many elephants. All his soldiers are naked, yet many among them be good with their muskets. The king is dressed in a fine painted cloth, made of cotton wool, about his middle; his hair is long, and bound up with a little fine cloth about his head, all the rest of his body being naked.

"The elephants are not so big as those of Pegu, which be monstrous large; but they say all other elephants do fear them. Their houses are very little, made of the branches of the palmer coco-tree. Their women have a cloth bound about them from their middles to their knees."

December, 1592.—*The Edw. Bonaventure*, Captain Lancaster, the first English ship that passed the Cape of Good Hope (eastward), and reached the Indian seas, appeared off Galle. It must seem strange that the English were so long after the Portuguese arriving in India; but they were engaged in other projects, their first voyages being to the western hemisphere. Besides, the Portuguese claimed, in virtue of a Bull of Martin IV., the exclusive privilege to navigate the Indian Ocean; and, maintaining it by force of arms, the English had no desire at that time to dispute it with them.[1] Ten years after the second Portuguese voyage to the coast of Guinea, Jean Tintam, in the time of Edward IV. (1481), formed a project of going there; but was stopped on the representation of the Portuguese am-

[1] Mill, Brit. Ind., p. 6.

bassador in London.[1] From 1526 to 1590 the English made several voyages along the western coast of Africa, getting no further than Benin; and Reynolds made an unsuccessful attempt to reach India in 1591.

The Spaniards also did not interfere with Portugal in the Eastern seas until Magellan, a discontented Portuguese subject, pointed out to Charles V., in 1519, a way to them by the south-west round Cape Horn, which he accomplished, surprising the Portuguese by his arrival in Borneo (1522). Magellan was killed in an encounter with the natives, but his lieutenant, Pigafetta, conducted the expedition round the Cape of Good Hope, and arrived at St. Lucar, being the first to circumnavigate the globe.

When Cortez had completed his conquest of Mexico, unaware that Magellan had passed Cape Horn, he, in 1521, ordered ships to be built at Zacatula, a port on the Pacific, with a view to reach the Moluccas and India.[2] In order to avoid a rupture with Portugal, Charles V. sold her his claim to the Moluccas, and it was agreed that the eastern hemisphere should belong exclusively to Portugal.

The English were chiefly engaged in endeavouring to find out a way to India and Cathay for themselves by the north-west. Sebastian Cabot, commissioned by Henry VII., sailed from Bristol in 1497, in order to discover a north-west passage, and got as far as fifty-eight degrees north latitude. Further stimulated by Magellan's success, Henry VIII. was solicited, in 1527, by Mr. Horne, a London merchant, who had resided some years at Seville, to aid an undertaking, but it was also unsuccessful.[3] After this, his majesty was so much taken up trying to discover a wife to suit him, that he cared little for any other discovery.

In 1551, a company was formed for discovering "unknown countries," directed by Sebastian Cabot, who took possession of North America. In 1553 Sir Hugh Willoughby was sent[4]

[1] Garcia, ch. 33.
[2] Churchill, Coll. Voy., intro., xlv.
[3] Hakluyt, Harris, Coll. Voy.
[4] Chur. Coll., intro., xvii.

with three ships to discover Cathay, and succeeded in reaching the bay of St. Nicholas, on the coast of Russia; from thence he journeyed overland, and paid a visit to the Muscovite court at Moscow. Many similar attempts followed, until experience at last taught the English the hopelessness of arriving at the East Indies by a north-west passage; and, determining to avail themselves of the routes opened by the Spaniards and Portuguese, Sir Francis Drake sailed, with five ships, from Plymouth, December, 1577, round Cape Horn. Returning south of Java, he passed the Cape of Good Hope, June, 1580, and arrived at Plymouth, September 25th, 1580, being the second circumnavigation of the world. Drake was knighted for this exploit; and Queen Elizabeth, in spite of the Portuguese claim to the exclusive navigation of the Indian seas, proclaimed the right of her subjects to trade there also.[1] In virtue of this proclamation, three[2] ships, the *Bonaventure*, the *Penelopy*, and the *Marchant Royal*, left Plymouth, April 10th, 1591. Scurvy had so weakened their crews by the time they reached the Cape, that the *Marchant Royal* was sent home from Algo-de-Saldana Bay, and the other two, continuing their voyage, left the Cape, February, 1592. The *Penelopy*, with the Admiral George Raymond, separated during a gale of wind off Cape Corentes, in the Mozambique Channel, and was never heard of again; while the *Bonaventure* was carried by the currents to the isle of Socotra. They then tried to reach the Maldives, but found themselves off Cape Comorin, in May, 1592; thence they directed their course to the Nicobar islands, and reached Pulo Penang in June. They then returned by the Nicobar islands to Ceylon, arriving off the south coast, December 3rd, where the ship ran on a rock. Getting off, they an-

[1] Macpherson, Annals of Com., ii. 166.

[2] An account of this expedition was first published in Hakluyt (1599). "A voyage of three tall ships to the East Indies, by the Cape of Buona Speransa, to the isles of Comoro and Zanzebar, on the backside of Africa, and beyond Cape Comori, in India, to the isles of Nicubar and Gomes Polo, Sumatra, and hence to Malacca, begunne by M. Geo. Raymond, in the yeare 1591, and performed by M. James Lancaster, and written from the mouth of Edmund Barker, of Ipswich, his Lieut. in the sayd voyage."

chored near "Punta del Galle," looking out for prizes, but the crew mutinied, and Captain Lancaster was obliged to return home. When near the West Indies, the *Bonaventure* was abandoned in a sinking condition, and her crew taken on board a French ship; but she was wrecked at Bermuda, when Captain Lancaster and his men built a small vessel for themselves, and eventually reached England by Newfoundland.[1]

Voyages in those days were not the easy affairs they are at present. Besides other dangers, their great enemy, scurvy, more than decimated the crews, rarely half returning home. This continued until 1780, when Sir G. Blane discovered that lime-juice was a cure for it. Out of one hundred and sixty-five men who sailed with Da Gama, in 1798, only sixty returned.[2] Linschotten says, "We arrived at Cochin from Lisbon (1584), having passed and endured much misery and foule weather, with sickness and diseases, as swellings of the legs, and scorbuicke, and pain in their stomachs" (p. 8).

Speaking of the arrival of the *Bonaventure* off Ceylon, Sir E. Tennent remarks (ii. 64), "For more than two hundred years after the arrival of the Portuguese in India, no vessel bearing the flag of England had been seen in the Indian Ocean." It was, in reality, only ninety-three years, and up to the year 1620 sixteen voyages were made; the second, in 1600, composed of four ships, commanded by Lancaster, being the first, on account of the East India Company. These early voyages appear to have had a good deal of the piratical character about them, very unceremoniously plundering Indian and Moorish vessels.[3] The majority were bound for the Red Sea and the Archipelago, where the English formed their first

[1] Astley's Coll. Voy.

[2] Maffius, lib. i. 28.

[3] At a later period the eastern coast of Africa, under the pretext of fighting the Portuguese, was infested by pirates and buccaneers, whose adventures form the subject of some of De Foe's novels. The castle Captain Kidd is said to have built as a stronghold for his ships and plunder is still shown on the shores of Johanna.

Eastern factory at Bantam, in Java, 1602, then Surat, 1609, Amboyna and Banda in 1616. The Dutch committed great cruelties against them at Amboyna in 1623, finally expelling the whole of the English factories from the Archipelago in 1682. Tavernier mentions the atrocities of the Dutch at Bantam, and an account of their proceedings is given in a work entitled "A Momento for Holland, or a True History of the Cruelties used on the English Merchants at Amboyna by the Netherland Government: London, 1653." And these were the people who revolted against Spanish cruelty

"Floris, a merchant on board Captain Hippon's ship" (1611), the next that touched off Ceylon, remarks "that the maps were very false, as they did not find the island of Seylan so broad as there laid down. Mr. Mollineux placed Punta de Galle in four degrees, but it lies in six degrees." (*Vide* ch. ii. 18). Captain Castleton, of the ship *Pearl*, gives an account of a cruize along the southern coast in 1613. "He first sighted the high land near Galle, November 12th. Coasting along by Diundra, they anchored, on the 16th, in Belligam Bay, where there were some Portuguese houses: here they sent two boats on shore for water, using every precaution against a surprise. While parleying with the natives, who spoke Portuguese, they were suddenly fired on from among some bushes with a quantity of small shot, which struck all the men in the boats, the natives rushing at the same time into the water to seize them, but the crews pulled off in time to escape. They then stood eastward along the shore, and again anchored at the river Wallaway (beyond Tangall), but they found the mouth of the river barred up with sand. Sailing further east, they came to a fine river, which he does not name (probably the Katteregam); here they watered, and some natives came to them, seeming much afraid, and making signs of friendship. Most of them had great holes in their ears, others had their hair long, and made up with a knot upon the crown, Chinese like. Two came on board, who spoke Portuguese, and promised everything, but performed nothing. He detained one of them until the other brought two calves, which was all

the provision he was able to obtain. Captain Castleton then anchored for a whole month off Dondra Head, when he returned to the Wallaway river, where he captured a ship laden with pepper and Sander's wood. After taking out a quantity of her cargo, the vessel was allowed to depart, and he quitted the island for home."[1]

[1] Astley's Coll. Voy.

CHAPTER XV.

MODERN HISTORY.

Arrival of the Dutch in Indian Seas.—The Dutch, who had imitated the English in trying to find out a north-west passage, were also forced to give up the design, and followed them round the Cape of Good Hope, their first essay being in 1595, when Cornelius Houtman sailed from the Texel, April 2nd, with four vessels, one being 563 tons burden, and conducted them to the Indian seas. They were delayed some months by scurvy at Madagascar, and thence passed by the Maldives to Sumatra and Java, where they got into various troubles and dangers, losing many men in contests with the natives and Portuguese; but eventually succeeded in returning to Holland, August 14th, 1597, laden with spices, only 80 men surviving out of the crews of 250 who left the Texel.

Houtman had been a merchant at Lisbon, where he was put into prison for making enquiries about India with a view of going there, and being condemned to pay a fine he could not pay, remained in prison until 1594, when he was ransomed by some Dutch merchants at Amsterdam, on his undertaking to show them the way to India and in conjunction with them formed a trading company called "La Compagnie des Pays Lointains." The account of his first voyage was published in Dutch, 1598; then translated into Latin under the title of "Diarium nauticum itineris Batavorum in Indiam orientalem."

Other expeditions quickly followed the first, and in a few years the Dutch became so formidable in India that most of the Portuguese possessions fell into their hands. Their first colony was formed at Bantam, in Java, 1602, and Batavia,

1610, which has always remained their chief settlement. Thence they soon pushed on to Formosa, which they took and traded with the Japanese, 1611, meanwhile seizing Amboyna and Banda, 1609. Malacca was captured 1641, and half Ceylon the same year. They formed a factory at Surat in Guzerat, 1616, pirating Moorish ships on the coast of Arabia, and even tried to get permission to erect a factory at Mocha, and finding the Cape of Good Hope strangely neglected by the Portuguese, who rarely even landed there, Van Reibuck, in 1650, took possession of Table Bay and colonized it.[1]

Not satisfied with the Cape of Good Hope route, in 1597 five Dutch ships, having several Englishmen on board, passed round Cape Horn, but only one ship returned. One of the Englishmen, named Lymehouse, settled in Japan, and sent an account of it to England.[2] The following year D. Noort made a voyage round the world.

Huygen Van Linschotten was the pioneer of the Dutch in India. In 1584 he formed part of the suite of Vincente Fonseca, archbishop of Goa, and accompanied that prelate to India and China, visiting Ceylon, which he calls "the best and most fruitful island under the heavens." The death of Fonseca, in 1589, obliged him to return to Holland, where he published an account of his travels in Dutch, 1591. This celebrated work was translated into Latin 1595, with notes by Paludanus, under the title, "Navigatio ac Itinerarium in Orientalem," and into English, London, 1598.

Its appearance greatly influenced his countrymen to undertake their voyages to India. Linschotten took an active part in the useless efforts which the Dutch made to discover a passage to the Indies by the North Sea in 1594, having conceived the idea from what he had heard in China.[3]

In the introduction to the "Recueil des Voyages,"[4] it is

[1] Baldæus, Chur. Coll. Voy., iii. 574 ; Astley's Coll., iii. 326.

[2] Chur. Coll., iii. 403 ; Hist. Gén. des Voy., x. 73 ; Crawfurd, Dict. of the Archip.

[3] Biographie Universelle.

[4] "Il n'y a point d'apparence qu'ils eussent poussé leur navigation au-delà de la

supposed that if the Dutch, who had the carrying trade of Lisbon in their hands, had been permitted to continue their intercourse with Portugal, they would have been content with the commerce of European seas, but there is reason to believe they were much influenced by Linschotten's work.[1] Besides, it appears Houtman was meditating a voyage to India many years before from the enquiries he was making at Lisbon, which led to his imprisonment, nor is it likely, with their great mercantile marine and trading propensities, they would have confined themselves to the commerce of European seas.

During the struggle between Philip II. and the Dutch which followed their revolt in 1577, they were able to create a numerous navy, and increased their wealth and power from having been allowed, singular as it may appear, to carry on a trade with the Spanish dominions in Europe. An idea of[2] general advantage could only have induced Philip II. to permit such a traffic; indeed the Spaniards would have been wanting many articles necessary for them if they had not allowed it.

This carrying trade was to a great extent a contraband and nefarious one, as they furnished goods to both friends and enemies. "Loud and bitter complaints were made by Queen Elizabeth and her Ministers against the traffic which the Dutch persisted in carrying on,"[3] and English privateers were allowed to capture their vessels to such an extent that the Channel became unsafe for them, and was also a reason why they sought another outlet in India.

All things considered, Philip II. in this respect treated them rather leniently than otherwise. No European state at the present time would tolerate such a traffic.

Although the Dutch were continually annoyed by the authorities in Spanish ports, and their crews persecuted and

mer Mediterranée, si les Espagnols n'eussent pas enlevé leurs vaisseaux et soumis leurs personnes aux rigueurs de l'Inquisition."—Avertis., i. 25, "Recueil des Voy. qui ont servi à l'établissement de la Comp. Hollandaise des Indes."—*Vide* Tennent, ii.

[1] Motley's Hist. United Neth., iii. 547.

[2] Russell's Modern Europe, ii. 110.

[3] Motley, iii. 545.

imprisoned by the Inquisition in 1586, when some of their ships were arrested at Lisbon,[1] their lucrative trade was not finally put a stop to until 1599. Philip II., before his death, transferred the sovereignty of the Low Countries to Archduke Albert, who married his daughter Isabella. They, in concert with Philip III., to reduce the Dutch to obedience, issued an edict precluding the Spanish Netherlands from all intercourse with Spain and Portugal.[2]

Spain also, in 1601, made an effort to stop them at sea on their way to India by sending a powerful fleet to cruise on their route; but failing in this, emissaries were sent to several Indian princes, saying the Dutch were pirates, without faith or honour,[3] to be treated accordingly, and they were harassed on all sides. This compelled the Dutch Government to give their merchant ships regular commissions of war, and the private company, formed by Houtman at Amsterdam, was granted a patent in 1609, for which they paid 300,000 florins, and all ships not belonging to the Company were prohibited from trading in the East or passing to India by either Cape,[4] a prohibition which induced Schouten to make an attempt to find out a new way to India southward in 1615.[5]

Admiral Van Warwick, a man of great energy and talent, was made their chief officer in the Indian seas, and so profitable was the Dutch East India Company to those first engaged in it, that they received for thirteen years an average return of forty per cent.

The second Dutch expedition to the East, consisting of two ships sent by Prince Maurice[6] from Flushing, March, 1598, took Captain J. Davis as pilot or sailing master. He sent

Davis, Holland, ii. 340.

[4] Davis, Holland, ii. 319. The editor of the Hist. Gén. des Voy., l'Abbé Prévost, says, "L'année 1605 fût célébré par une déclaration du Roi d'Espagne portant défense aux habitans des 'Provinces Unies,' sous peine de punition corporelle, d'exercer le commerce en Espagne et dans les Indes."—x. 79. Recueil des Voy., &c., i. 31, 37.

[3] Hist. Gén., x. 75.

[4] Hist. Gén. des Voy., x. 78.

[5] Moore's Coll., i. 49.

[6] Hist. Gén. des Voy., i. 405.

an account of the voyage in a letter from Middlesboro' to Robert, Earl of Essex, printed in Purchas and Astley's collection. They tried to reach Ceylon, but were unable, from contrary winds, to make the island.

First appearance of the Dutch in Ceylon.[1]—In May, 1602, the Dutch made their first appearance in Ceylon at Batticaloa, on board *La Brebis*, commanded by Joris Spilbergen, who was sent from Holland with three ships, furnished with a special commission from Prince Maurice of Nassau. The natives, who thought they were Portuguese in disguise, acted very circumspectly, purposely delaying him in port, but offered to sell pepper and cinnamon, while the Moodliar of Batticaloa tried to impose a chieftain in the vicinity on the Dutchman as the king. After spending a month in inaction, Spilbergen learned that the king or emperor was in the interior, and sent a message to him informing the Raja of his arrival. Meanwhile, his second in command, who had been separated from him in December during a storm on his voyage out, came into port. This decided him to proceed to Kandy, previously demanding five hostages from the chief of Batticaloa, and explaining to his officers for the first time that his mission was to present letters to the king, who, when he heard of Spilbergen's arrival near Kandy, sent one of his officers, Emanuel Dios, and several Portuguese, who had their ears cut off to denote that they were in his service, to conduct him to his capital,[2] where he was received with all honours, including the

[1] An account of this mission to Ceylon is given in the "Relation Spilbergen," published in Dutch at Delf, 1605, and at Amsterdam, 1617. A French trans. is in the Hist. des Voy., tome x. p. 324, and in the Recueil des Voy. de la Comp., Rouen, 1745, which differ considerably. Sir E. Tennent quotes another French edition, which appears to be different from these.

[2] "Emanuel Dios met veel andere Portugisen die alle de ooren opghesneden zijen dienende den voorndemden Coninck."—p. 22. Spilbergen mentions in his "Relation" that at Bintenne the king sent him provisions, fruit, and wine, grown at Kandy, as good as that at Portugal. "Ende alle uyren sont hy volck met vietualie, fruyten, ende wijn, die hy in Candy selfs doet planten, ende is seer goeden strereken wein als of hy in Portugael ghewassen waer."—P. 22. Sir E. Tennent (vol. ii. 35) supposed "Spilbergen was alluding to wine from grapes," but the vine does not produce grapes at Kandy at present, nor is it probable it ever did; and in vol. ii. 206, describing Kandy, he says, "Valentyn at a later period

beating of "tom-toms," and parading of the king's troops and trophies, among whom were a number of Portuguese renegades, and eight of their flags.[1]

At the interview which followed with Wimala Dharma, Spilbergen laid a Portuguese standard reversed at his feet, the king at first offered to sell cinnamon, thinking that was what Spilbergen wanted, but upon learning that he came with letters from Prince Maurice proposing to form an alliance with him, he was so pleased that he rose from his seat and embraced the ambassador, delighted at a prospect of being able to expel the Portuguese by the aid of the new comers, and gave him all the cinnamon he had, regretting there was so little, as the trees had been all cut down in his dominions to prevent the Portuguese obtaining it. Spilbergen, in return, presented Wimala Dharma with a large portrait of Prince Maurice on horseback.

Spilbergen was presented to Donna Catharina, and remained in the capital until the approach of the N.E. monsoon compelled him to depart, laden with presents, and leaving with the king two musicians, named Erasmus Martensberger and Hans Reinful, whose music charmed his majesty.

Spilbergen also had letters authorising him, in Don Juan's name, to arrange a treaty with Prince Maurice. The alliance was cemented by Spilbergen presenting Wimala Dharma with the spoils of a Portuguese ship captured within sight of Batticaloa, after which he departed for Achin, September, 1602.

During Spilbergen's absence at Achin, Sebald de Wert,

speaks of it in similar terms." But Valentyn was only repeating Spilbergen's account, and was not referring to a later period at all, and has introduced the words "van een druif" (from grapes), which are not in Spilbergen's text (ed. 1617). Valentyn says, "Alie uur zond de vorst hem volk met levens-middelen, vrugten, en wyn, van een druif, die hy zelf in Candi, had doen planten, en die zich zelze zoo goed was als eenige wyn in Portugal Gewassehen." — v. 104. The Freneh translation says, "Un fort vin du pays qui ne cède rien à eelui de Portugal."—Hist. des Voy., x. 328, et seq. ; Reeueil des Voy. de la Compagnie Holl., iv. 69, 78. Spilbergen must have been alluding to toddy, or a liquor made from it, similar to that deseribed by Linsehotten, manufaetured at Goa, by adding Ormus raisins, "of a faire red eolour as if it were Portugal wine, and differeth not mueh," which he said was largely exported.—P. 102.

[1] "Ende Verloochende Portugisen, hadde by hem acht vheghende dendelen waer onder eenighe waren die fy onlanghs de Portugissen, afghenomen hadden."—Rela. Spilbergen, p. 23.

another Dutchman, visited Batticaloa, April, 1603, with seven ships, and had several interviews with Wimala Dharma, who came to this place in order to induce De Wert to attack Galle with his fleet.

De Wert pressed the king to pay him a visit on board his ships; but the latter, suspecting some treacherous design of carrying him off, refused the invitation, whereupon De Wert said if he would not visit his ships he should not attack Galle. The king, irritated at the Dutchman's rough manner, ordered his attendants to seize him,[1] when De Wert drew his sword, and was killed in the broil that ensued, along with fifty-three of his men, who were assembled on the beach waiting for their commander, the remainder escaping by swimming to their ships.

There are several versions of this tragic affair and the cause of the quarrel. Spilbergen and Van Warwick say the king, who spoke Portuguese, used the words, "Matta," or "Matar esto cão,"—Kill the dog. Baldæus says De Wert was heated by wine, having drunk too much, and insulted the king by an allusion to his queen, who gave orders to his attendants to "bind the dog;" this, in Portuguese, would be "Atar esto cão," and the courtiers may have mistaken it for "matar" (kill).

The king's subsequent explanatory letter alluding to wine, makes it probable De Wert was drunk. Valentyn adds nothing to clear up this event, except that the Dutchman always treated the king very haughtily. De Wert was an old sailor, having sailed through the Straits of Magellan some years previously.

Wimala Dharma, who appears to have regretted this massacre, and anxious to keep on terms with the Dutch, next day sent a laconic letter on board their ships, as they still remained in the harbour, saying, "Que bebem vinho não he bon. Deos ha faze justicia. Se quifieres pas, pas; se quires guerra, guerra." He who drinks wine comes to no good. God is just.

[1] Baldæus in Chur. Coll., iii. 681; His. des Voy., x. 338; Relation Spilbergen, p. 30, 39; idem, Wybram Van Warwick.

If you want peace, let it be peace; if you want war, let it be war.[1]

The Dutch commander, Petersen Enchuyse, on receiving this letter, accompanied by verbal apologies from the messenger, thought it prudent to take no notice of the murder of De Wert and his men, patching up the affair with the king, thus showing they intended to sacrifice everything to their trading propensities.

At the death of Wimala, in 1604, a contest arose for the throne between a prince of Oovah and a brother of the king, named Sennerat, a priest of Adam's Peak, who had his rival assassinated, and seized the throne, marrying the widow Donna Catharina.

In 1609 a truce was concluded between Holland and Spain for twelve years, when it was stipulated that Holland should have a share of the Indian trade, and the armistice be extended to India at the end of twelve months.[2] Nevertheless the Dutch East India Company sent ambassadors to various Indian princes to excite them against the Spaniards, and Pierre Both, the first Dutch governor-general of India, was despatched in the *Lion Noir* from Holland, 1612, with a letter from Prince Maurice of Nassau to Sennerat, offering to assist him with men and ships if the Portuguese attacked him.[3]

Both proceeded first to Batavia, and not being able to go to Ceylon himself, sent Marcellus De Boschouwer as envoy to Sennerat with the letters, and a treaty was arranged between them by which the Dutch obtained permission to build a fort and make a settlement at Cottiar, in the bay of Trincomalee, where their fleet remained while the ambassador was at Kandy.

Boschouwer was induced by the king, eager for war, to remain in Ceylon, conferring on him the chief command of his troops and several high-sounding titles, as "The Knight of the Sun," and "Prince of Migone," a district in the Seven Corles.[4]

[1] This letter is found in Baldæus and Valentyn, v. 168.

[2] Davis, Holland, ii. 436.

[3] Hist. des Voy., tome 17, p. 65, 66

[4] Baldæus, iii. 682, 687

The Dutch had barely completed their fort at Cottiar, when the Portuguese surprised and captured it by a clever *coup-de-main*, marching across the island by jungle paths for the purpose. Sennerat was also surprised in the midst of his preparations for the siege of Colombo and Galle, and his troops defeated in the Seven Corles. Boschouwer being wounded, the Portuguese, flushed by their victory, marched to Kandy, where they were in their turn repulsed.[1]

During these events Donna Catharina died of grief for the loss of her eldest son, who was poisoned by the king his stepfather to make way for his own son. Baldæus says she died a Christian, and gives her conversation with Boschouwer when she was dying (p. 692).

In 1615 Boschouwer was sent by Sennerat to Holland for aid, but being badly received by the "States General," who considered he had neglected his duty by remaining in Ceylon, and were unwilling to assist Sennerat, a war with the natives having broken out in Batavia, he went to Copenhagen, having learned that the Danes, who had formed an East India Company in 1611, were anxious to make a settlement in India, and entered into an engagement for this purpose with Christian IV.

The expedition, consisting of several ships, which left Denmark in 1618, was an unfortunate one. Boschouwer died during the voyage out; and the fleet, delayed by many storms and mishaps, was twenty months reaching Batticaloa, when Sennerat refused to acknowledge it, as he did not authorise Boschouwer to go to Denmark.

The admiral's widow, who called herself Princess Migone, and accompanied the expedition, was at her request sent to Kandy. One of the ships being plundered and abandoned by her crew, who escaped in their boats to Coromandel, Gule Gedde,[2] a Danish noble, and second in command, in the

[1] A number of Dutch travellers, who wrote accounts of their settlements and wars in the East, went there at this period. Van den Broeck, in 1615, says he was sent on a mission to the king, but was unable to reaeh Kandy, where he was invited by Sennerat when he heard of his arrival. He deseribes Ceylon as the most agreeable and fertile of islands. 128lbs. of einnamon eost only 40 sols. Van Caerden visited the western coast in 1607, "but, finding he could do the Portuguese no damage, left."—Hist. des Voy.

[2] Hist. des Voy., xiv. 130.

dilemma sailed to Tranquebar, where he founded the Danish settlement, purchasing this small place from the Naik of Tanjour for Christian IV., who the year after built a fort there.

Sennerat, now hopeless of obtaining assistance from abroad, induced many of the lowland chiefs to join the Kandyans in a war of extermination against the Portuguese, which raged on all sides. Constantine de Saa, the governor, stimulated by the reproaches of the viceroy at Goa, at this state of affairs imprudently marched into the Oovah country with all the troops he could collect, 1,300 Portuguese and 9,000 low country Sinhalese, who deserting to the enemy in a critical moment, the Portuguese were surrounded at the foot of the mountain Wellewawey at Badulla, and the greater part killed, including their commander, whose head was cut off and presented on a drum-head to young Singha, the king's son, who was bathing in a neighbouring brook. Knox says (p.117) that De Saa, "rather than fall by the enemy's hand, called his black boy to give him water, and, taking a knife from his belt, stabbed himself." Many of the Portuguese found shelter in the forests of the vicinity, where their descendants are still to be found, only distinguished from the natives by their religion and fairer skins.[1]

Great was the grief of the Portuguese at the fate of De Saa, who was much beloved in the colony. Ribeyro says there was not a native of Portugal in the island who did not shed tears at his death (p. 87).

The Kandyans, following up their victory, besieged Colombo (1630), "which was reduced to such straits for food, dead children were eaten, and the Portuguese position in the island seemed so hopeless," Faria says, "ships were sent from Goa to take away the cinnamon from Colombo, the only valuable left them; but their arrival frightened away the besiegers, who thought they brought a relief to the garrison" (iii. 396).

Soon after this troops were sent from Malacca, Cochin, and Goa, including 300 Kaffirs, and the Portuguese were able to recover their position in the island.

At the death of Sennerat, in 1632, he was succeeded by the

[1] Sidath Sangara, p. 211; Rajavali, p. 323; Baldæus, p. 702.

youngest of his three sons, Singha II., and as soon as he came to the throne the Portuguese proposed and made peace with him; but losing no occasion of breaking it when it suited them, Singha, in disgust, sent a letter, in 1636, to De Reynier, the Dutch governor of Palicatta, in India, complaining of their breaches of faith, and demanding assistance against them.[1]

There can be no doubt, as Ribeyro and other Portuguese writers admit, their bad faith at this time led to their loss of the island. Some relate, "that when attacked in violation of treaty, Singha sent a monk to the Portuguese camp to swear on a crucifix in his name that he (Singha) had acted justly."

Singha's letter to De Reynier was forwarded to Batavia, where it was very welcome, the Dutch Government being at the time again anxious to obtain a footing in Ceylon. A Van Diemen had been sent from Holland to Batavia, as governor-general, to inquire how it could be accomplished, and was there when Singha's letter arrived. Jean Thyssen and Adrien Helmont were accordingly sent as envoys to Ceylon to prepare the way for a descent on the island, and had an audience with Singha, November 19, 1637, who promised to divide his conquests with the Dutch, and give them all the cinnamon and pepper in the island.

They departed on the 27th, accompanied by three of Singha's ambassadors, to negociate with Admiral Westerwold, and joined his fleet, then at sea cruising off Goa.[2]

Meanwhile the Portuguese, hearing of the preparations against them, attacked Singha, and a force under De Mello marched to Kandy, which they plundered and burnt, but with a singular infatuation were again accompanied by a large proportion of Siṉhalese, who deserted at Walane on their return, and a storm of rain rendering their muskets useless they were defeated, 70 Portuguese and 800 Siṉhalese being killed, the Kandyans making a pyramid of their heads.[3] The sword of Diego de Mello, who fell on the occasion, was afterwards presented by Singha to Admiral Koster. Baldæus says

[1] Singha's letter is given by Baldæus, 703.
[2] Hist. des Voy., xvii. 67.
[3] Ribeyro, p. 220; Rajavali, p. 314.

De Mello had 2,300 Portuguese and 6,000 Negroes (Kaffirs) with him, which seems improbable.

On the 4th January, 1638, Admiral Westerwold defeated the Portuguese fleet off Goa, "and Singha's ambassadors, who were on board the Dutch fleet, declared they did not want any further proof of the hatred the Dutch bore to the Portuguese."[1]

Dutch Invasion and Capture of Ceylon.—All being now clear for a landing on the island, Westerwold arrived on the 10th May, 1638, at Batticaloa, with four vessels and 840 men; the fort was speedily captured, and a treaty, offensive and defensive, concluded between Singha and the admiral, which is given at full length by Baldæus (p. 713). According to the eighth article the king engaged to pay the expenses of the war in cinnamon, and gave his allies a monopoly in the spice.

Trincomalee, where the Portuguese had built a fort in 1622, was captured May 1st, 1639, Matura and Galle in March, 1640, and Negumbo in November of the same year. Galle made a vigorous resistance to Admiral Koster, and Ribeyro relates an heroic action on the part of the wife of the governor, F. De Britto, who saved her husband's life when he fell wounded during the assault at the head of his men, by throwing herself on his body. They were kindly treated by the Dutch, the captain of the vessel, who conveyed them as prisoners of war to Batavia, resigning his own cabin for their use during the voyage.

Soon after the capture of Galle, Koster went to Kandy to confer with Singha, who, already jealous of the Dutch, and dreading their power, began to temporise. Koster, a rude sailor, unaccustomed to the arts of diplomacy, "growing impatient of vain promises and his detention about the court, uttered threats against Singha, which, coming to his ears, he was dismissed without the usual honours, and conducted to Batticaloa, where he was murdered by Singha's orders."[2]

The Dutch again took no notice of this second murder of their envoys. Meanwhile, Colombo was besieged by Singha,

[1] Hist. des Voy., xvii. 70

[2] Baldæus, p. 786 7.

and Baldæus says, "might have been taken, but the Raja thought it better to play trimmer between the two European nations."

While Singha was thus playing with the Dutch, a Portuguese detachment from Goa[1] retook Negumbo, but it was again recaptured by the Dutch under Francis Carron, in January, 1644, in consequence of the negligence of the garrison. Hostilities were suspended soon after between the Europeans, news arriving of the recent revolution in Portugal and separation from Spain, when Philip IV. was expelled and John of Braganza proclaimed king,[2] which led to a truce between Holland and Portugal for ten years from 1640, extending to the colonies, where it was stipulated that both parties should retain all places in their possession, and mutual commerce be established between them.

Singha, whose only object in forming an alliance with the Dutch was to rid himself of the Portuguese, now found that he had two foreign powers in the island instead of one, and tried to embroil them by alternately helping and betraying both. Shortly before the armistice he had become so jealous of his allies that he assisted the Portuguese to retake Negumbo. They remained at open hostiltiies with him to the last, and during the truce several times defeated his troops, but the Dutch, expecting a renewal of the war with the Portuguese, tried to conciliate the Raja, and put up with his outrages; for instance, in the beginning of 1646, Nicolas Overschie, the commandant of Negumbo, seized some elephants belonging to Singha, outside the limits of the Company's domains, for which he took speedy vengeance. In May, Adrien Van-der-Stel, and about 700 men, who appear to have been a sort of foraging party, were suddenly surrounded in their camp in the Seven Corles, and made prisoners, when Van-der-Stel was beaten to death, and his head cut off and sent rolled up in a silk handkerchief to the Dutch governor at Galle, while his men, numbering 688, were marched prisoners to Kandy.[3]

[1] Ribeyro, p. 103, 122.

[2] Davis, Holland, ii. 619, 691; Russell, Modern Europe, ii. 175.

[3] Sir E. Tennent, quoting Valentyn, says, "Singha marched through Portuguese

Instead of obtaining redress for this outrage, Maatzuyker, the governor, wrote to Singha making apologies, and offered to return the four elephants taken by Overschie, who had acted without orders and was recalled for it, and begged to be allowed to obtain cinnamon.

In order to keep him in good humour, they sent, in 1650, a present of some scarlet cloth, gold and silver lace, Dutch liquors, Spanish wine, and a hat and plume, which the Raja, who had a weakness for dress, condescended to wear.[1] Gold chains, saddles and bridles ornamented with gold and silver lace, &c., were forwarded in 1651, and Baldæus gives a list of curious presents given to Singha by General Hulst shortly before the siege of Colombo, namely, two Persian horses, one Turkey gun, a Persian bow and arrows, a rich Japanese gown, some greyhounds, two Persian sheep and goats, and some sandal wood. For the young prince, Singha's son: a Persian horse, a silver basin, two fusees, and one hogstone, called "pedra di porco" (p. 746). The last is said to be a substance in the head of the porcupine, and imagined in the East to be an antidote to poison.[2]

At the conclusion of the armistice in 1650, Singha again

territory to reach the fort of Negumbo, made prisoners of the garrison, and sent the heads of the officers rolled in silk to the commandant at Galle," ii. 44, which is quite erroneous. The passage in Valentyn is as follows:—"Dit was in de Volgende tyd ook oorsaak dat de heer Commanduer Adrian Van der Stel den 19 Mey dezes zelven jaars (1646) in de 'Zeven Corlas' door Raja Singha's Volk omzingeld *dodgeslagen, t hoofd afgekapt (dat zy in een Zyde dock aan ons zonden)* en dat een getal van 688 Nederlanders na Candi gevangen gevoerd wierd, gelyk hier na ook ten deele uyt de heer Maatzuykers brieff blykt. Al bevorens had Nicolas Overschie hoofd Van Nigombo, boven de grenzen der E. Maarschappys Kiezers tamme Olifanten doen ophalen, l'geen dien Voorst jodanig verbitterde, dat hy, al zyn magt by een rukkende, dit aan de onzen zogt te wrecken, gelyk hy metter daad dede dwingende de onze hoewel zonder nood om zich over te geven."—Vol. v., chap. xi., p. 121. M. Prévost, in the Hist. des Voy., xvii. 85, has a French translation of this passage from Valentyn which agrees with that given above. Ribeyro and Baldæus both mention this affair, but say nothing about Van der Stel's head being sent in silk to Galle, which is probably an invention of Valentyn's.

[1] 5 ellen rood scharlaken, 10 ellen goude en zilvere kant, een hoed met een schoone pluim, een Kelder Hollandze gedistelcerde watern een vaatje Spaanze wyn. —Valentyn, p. 136.

[2] Tavernier, Trav.

offered to assist the Dutch, but hostilities did not commence until 1652. The Portuguese garrison of Colombo at this time was in a state of mutiny against their governor, Manoel Mascarenhas, who was accused of neglecting the defence of the island, and, marching out, they attacked the Dutch at Negumbo and other places,[1] but nothing serious occurred until 1655, when reinforcements arriving from Batavia under General Hulst, the remaining Portuguese positions were gradually captured, Colombo surrendering May 12, 1656, Souza Coutinho, the governor, ceding possession of the capital to Adrien Vander-Meyden. Manaar and Jaffna, their last possessions, were taken, in 1658, by the Dutch fleet, the garrisons being sent to Europe and the friars to India.

Minute details of the siege of Colombo, which commenced November 9, 1655, are given by Baldæus. The Portuguese made a desperate resistance, although the garrison was chiefly composed of mercenaries of various nationalities, including Germans and Javanese. Several friars were killed while encouraging the soldiers, and fighting by their side. General Hulst, the Dutch commander, was also killed, and the town for years after bore the marks of the struggle. Gautier Schouten, a traveller in 1661, says "entire streets were overgrown with grass, and many buildings in ruins." According to Baldæus (p. 779), seven loads of musty rice, some cinnamon, arrack, and 1,500 gulden in coin, were the only valuables found in Colombo.

Thus fell the Portuguese power in Ceylon, after a duration of nearly 150 years—a continued reign of spasmodic, desultory warfare, bloodshed, and extraordinary mismanagement. According to all appearances they might have conquered the whole island and dethroned the native rulers within a few years after their arrival, as the Kandyans never could have been very formidable opponents. Had the Portuguese opened up the interior by making roads, which they never thought of doing, employed fewer native auxiliaries, and relied less on the alliances of the chiefs, who always betrayed them, they would

[1] Ribeyro, p. 131.

have been more successful, all their disasters being traceable to these causes.

O. F. Navarette, a Spanish friar, who visited Colombo for a few days in 1669, says "the Portuguese lost the island as basely as they had done Malacca; so he was told. Some blamed A. De Souza Coutinho, brother to him that lost Malacca; others said it was a judgment on them. The king, though a heathen, begged peace of them with a crucifix in his hand; what more could a Christian do? Yet the Portuguese complained the natives took part against them; it would not have been wonderful if the wild beasts had done the same. The island was one of the best in the world for its climate and produce. The scent of the oil of cinnamon was enough to raise a dead man," &c.[1]

List of Portuguese governors of Ceylon, taken from Ribeyro, who has omitted the dates when some were appointed :—

Pedro Lopez De Sousa	1517
D. Hieronimo De Azevedo	
Francisco De Menezes	
Manoel Homen Mascarenhas	
D. Nuno Alvarez Periera.	
Constantino De Saa-y-Noronha	1620
George D'Albuquerque	
Constantino De Saa-y-Noronha (again)	1630
Don George D'Almeida	
Diego De Mello	1637
Antonio Mascarenhas	
D. Filippe Mascarenhas	
Manoel Mascarenhas	1652
Francisco de Mello de Castro	
Antonio De Souza Coutinho	1656

[1] Chur. Coll. Voy., i. 303.

CHAPTER XVI.

MODERN HISTORY.

The Dutch Régime. — The Dutch had no sooner taken Colombo than Singha demanded that it should be given up to him, "in virtue of the treaty with Admiral Westerwold and the promise of General Hulst before the siege," and his late allies were obliged to drive his troops from the environs of Colombo, where Singha had collected them, in order to take it by force. There is nothing in the treaty to warrant his claim, but it is evident from Singha's letter on the subject given by Baldæus, that he was led to believe it would have been surrendered to him when the Portuguese were expelled.

In a state of sullen rage at being thus foiled, Singha retired into the interior, cut off all supplies from the coast, and tried to provoke the Dutch into a war by ordering his soldiers to capture all they could find, or Sinhalese serving under them, and cut their ears and noses off;[1] and to show still further his dislike of his late allies, invited the Portuguese remaining in the island to settle in his dominions, granting them many privileges, and maintained several hundred families at his own expense in Kandy and elsewhere.[2] Ribeyro says 900 Portuguese families availed themselves of his offers and settled at Ruanwelle, taking with them their priests (p. 144).

But the Dutch, whose policy in Ceylon was the reverse of their predecessors, evaded and cajoled him, putting up with his insults and aggressions for the sake of their commerce,[3]

[1] Baldæus, iii. 780.

[2] Navarette, p. 303.

[3] The English are not free from this kind of subserviency to native princes in India, and with the same motive. Sir E. Tennent (ii.), remarks, "It is to be re-

while quietly strengthening their forts on the coast, which they kept well armed and provisioned for a twelvemonth's siege, at the same time hypocritically offering to give up Colombo if the walls were demolished and when he paid the expenses of the war, well knowing he was not able to do so; for Singha, in his anxiety to get rid of the Portuguese, had undertaken more than he was able to accomplish, probably intending to do the Dutch someway afterwards; but they were too knowing for him.[1] Tavernier says they demanded 50,000 crowns as the expense of the war, and was sure the King had never seen such a sum together in his life, which was very likely; but he engaged to pay in cinnamon, and would have found it equally difficult to collect that quantity of spice.

The Dutch continued to send Singha presents and ambassadors, who presented their servile letters, wrapped up in silk,[1] on their knees; although he refused to take the presents, and imprisoned their envoys, and even executed one. He also took Belligam from them by a surprise, and carried off ninety prisoners, of which they took no notice.[2] Valentyn gives a list of presents sent in 1679, similar to those already quoted; but an ambuscade was laid for the escort who took them, and they barely escaped with their lives (v. 302).

Not that the Dutch could have been afraid of Singha or their ability to defeat his ragamuffin troops, but being unacquainted with the interior of the country they did not like to incur the expense, and thought it cheaper to buy peace. Their conduct was no doubt base and obsequious. "They," says Knox, "knowing his proud spirit, pushed their ends by representing themselves to be his majesty's humble servants and

gretted that the postponement of national honour to commercial advantages was not confined to Holland. There is nothing more disgraceful in the records of the Dutch than the official documents of the East India Company at the beginning of the last century, who, in the name of God, laid at the feet of the Great Mogul the supplication of the Governor of Bengal, 'whose forehead is his footstool,'" &c.—Letter of Governor Russell, Sept. 1712. It may be added that the murder of Colonel Stoddart and Lieut. Conolly, British envoys, by the Emir of Bokhárá was never avenged as it ought to have been.

[1] Hist des Voy. xi. 127, 266; xvii. 118, 145.

[2] Knox, pp. 181. 39, 179.

subjects, and that it was out of loyalty to him that they build forts and keep watches round the country, to prevent foreign nations and enemies coming; and that as they were thus employed in his majesty's service, so it is for sustenance which they want that occasioned their coming into his majesty's country. And thus they flatter him, ascribing to him high and honourable titles, which he greatly delights in." They acted just in the same way elsewhere. Commodore Roggewein asks, how comes it to pass "that the Dutch, who assume such a despotic power through the East Indies, submit to such slavish restrictions as are put on them by the Japanese, and particularly how comes it to pass that they deny they are Christians?"[1]

Knox also gives a curious insight into the Raja's manner of treating the Dutch ambassadors at Kandy, saying, "there are five ambassadors whom he hath detained," the first fell in love with the wife of a Sinhalese who took refuge in his house from her husband's bad conduct. Singha gave her to the ambassador on his agreeing to enter his service; but some time after the Dutchman sent a letter privately to his countrymen informing them of an intended attack from Singha, which falling into the Raja's hands, he had him executed. This was doubtless the person named François Hœs, mentioned by Van Goens, the Dutch Governor, in his report (1663), the nature of whose crime they could not discover.[2]

The second, Henry Draak, was detained a prisoner until he died, when Singha sent his body to Colombo.

An attempt was made to detain the third also, but the ambassador boldly took leave of the Raja at an interview, and left the town with his attendants.

John Baptista, the fourth, was not so lucky, being a prisoner when Knox escaped; and so was the fifth, named Bucquoy, who brought, in 1677, a lion as a present, which Knox says was "only a whelp; this man and his lion were kept at a place twenty miles from court for a year, when the animal died." The envoy, weary of living like a prisoner with a guard, resolved

[1] Voy. of the Dutch West India Company (Harris), i. 305.
[2] Hist. des Voy., xi. 126.

at last to see the King by force, who, hearing of his coming, ordered them to stop and keep him in the place they met him, which was done for three days, not letting him go either forward or backward, when the King gave an order to send him back to his house again." Valentyn says it was not known what became of him, but Knox mentions he was alive when he made his own escape in 1697.

The Raja's tyranny provoked his own subjects into a revolt in 1664. Every person in his dominions suspected of Dutch leanings was tortured or executed, until the people at last forced him to fly from Kandy, and proclaimed his only son, a child, king; but the boy, frightened at the commotion, escaped with his aunt from the town and joined his father, who subsequently had him poisoned to prevent a recurrence of the kind.

We are indebted to Knox for a description of this cruel and capricious tyrant, almost the only one of a Sinhalese sovereign to be found. He says, "Raja Singha is not tall, but very well-set; colour somewhat of the blackest; great rolling eyes, turning them and looking every way, always moving them; a brisk, bold look; very corpulent and lively; somewhat bald; a large comely beard and great whiskers; bears his years well, being nearly eighty; is very abstemious and plain in his living, consisting chiefly of fruit, rice, and vegetables; eats off a green plantain leaf in a golden basin; although an old man, yet he appears not to be like one neither in action nor countenance; his apparel is very strange and wonderful, not after his own country or any other, being his own invention; on his head he wears a cap with four corners, like a Jesuit's, three tier high, and a feather standing upright before; his doublet of so strange a shape I cannot describe it, the body one colour and sleeves another; he wears long breeches to the ankles, with shoes and stockings; his sword hangs in a belt with a scabbard made of beaten gold, and carries a gold-headed cane.

"He lives in a palace full of windings like Woodstock bower, and keeps a number of elephants close by to trample down a crowd, and seems to be naturally disposed to cruelty, for he sheds a great deal of blood, and gives no reason for it, in tortures and painful deaths upon whole families—hanging their hands about

their necks, pulling away their flesh with pincers, and burning them with hot irons to extort confessions; many tell more than ever they knew to escape it. He makes them eat their own flesh, and mothers their children. The dogs follow prisoners to the place of execution, and are so accustomed to them that, seeing a prisoner led away, they follow after."

Having exhausted his fertile brains in the invention of tortures, Singha sent one of his chiefs, who had displeased him, to the Dutch, in order that they might invent something new, but the lucky chief was kindly treated by them.

Knox's account of his dress is confirmed by Valentyn, who says "he was so strangly set up with mosquito drawers and feathers that he looked more like an old Portuguese, or a court buffoon, than an Emperor."[1]

During the contests which took place after the death of De Saa, Singha, then young, exposed himself very much to the enemies' fire, and a Kaffir sent a ball through his cap; the prince returned the fire and killed the Kaffir. Dr. Davy (p. 307) says his musket was found in Kandy by the English, in 1815, with the following inscription on it: "This is the gun with which Raja Singha killed the Kaffir." According to Ribeyro, he was educated by the Portuguese (p. 93). Sir E. Tennent quotes a curious letter that was in his possession, from Singha, in 1652, to the Governor of Galle, whom he calls his vassal, begging of him to send some trained hawks, as the Raja was fond of hawking (ii. 48).

The Dutch have been described as "practising all the low arts of petty shopkeepers. As governors, they were arrogant, cruel, and despotic; as merchants, mean, oppressive, and avaricious."[2] The privilege of exclusive trading in the East having been granted in 1609 to the Dutch East India Company, to whom Ceylon virtually belonged, they established a monopoly of everything the island produced, which could only be obtained at their stores; and no private trading was allowed

[1] "En zoo wonderlyk van kleederen en toetakeling en zyn leven, dat hy vee beter een ouden Portugezen met zyn miskiten-of muggenbroek en een hof-nar zyn muts vol pluymen dan wel een Keizer geleek."—Vol. v. 200.

[2] Asiatic Jour., xii. 272.

without their permission until towards the close of their reign, when the restrictions were partially relaxed. "Long after the power of the Portuguese declined, the Dutch maintained their right to the exclusive trade of India, and it was only at the conclusion of the war of 1784 that England obtained from Holland a formal declaration of right to trade in India."[1]

However the Dutch may be blamed for these exclusive measures, they were quite in accordance with the jealous spirit of traders at all times. The English East India Company enjoyed until 1830 the almost exclusive privilege, among British subjects, of trading to India and China, vessels exceeding 300 tons burden not being allowed to pass the Cape of Good Hope.

Dutch governors were told that their next duty, after keeping peace with the natives, was to exclude Europeans and their ships from Ceylon.[2] Lullier, a French traveller, who passed the island March, 1702, gives this as a reason for not landing: "Où les Hollandais, dit-il, ont à présent la politique de ne recevoir aucun navire étranger, dans la crainte d'inspirer le désir de la partager."[3] Still they did not altogether exclude foreign ships and travellers. Tavernier was at Galle in 1648, and Le Brun, a French traveller, in 1704; Sir T. Herbert stayed a few days at Colombo in 1634; Thunberg, a Swedish naturalist, travelled along the coast from Colombo to Matura in 1777, and C. W. Girike, a Danish missionary, visited the island about the same time, remaining for some months. His diary is entitled "Von London nach Ceylon und Cudelur en den jahren 1766-7." Jean A. Mandelsloe, a traveller rather inclined to the marvellous, arrived there in 1659; he was a member of a distinguished family in Holstein, and accompanied the Duke of Holstein in his wanderings through the East to China. His travels were published at Leide in 1718, and translated in Harris's collection (i. 778).

The Dutch particularly disliked and oppressed the Moormen as acute rivals in trade, and tried various means to crush them. Extra import duties were imposed on articles imported

[1] Tennent, ii. 64. [2] Valentyn, p. 343.
[3] Hist. des Voy., xiii. 78.

by the Moors, who were prohibited from holding land, or living in the forts of the Dutch, were obliged to have a licence to trade in native villages, and pay a poll-tax of twelve rix-dollars and one-third of their property to government at their death.[1] Still, Valentyn says, the Moors managed to have a large share of the trade of the interior.

The Siṉhalese Catholics, who were very numerous, were also persecuted, not only by open violence, but by the slow and sure sap and mining process ; putting a ban on them, and expelling their priests. It is a pity that the Dutch, who complained so bitterly of Spanish persecution of themselves, did not show a more tolerant spirit. In the seventeenth article of the treaty between Admiral Westerwold and Singha they stipulated that "His Majesty would not suffer any priests or friars to remain in his dominions." The "Asiatic Journal" for 1821 gives an account of the persecution of Padre Jos. Vaz by Van Rheede, the Dutch commissary at Jaffna, when Vaz's congregation were cruelly beaten by Rheede's soldiers, one man being killed and seven condemned to hard labour in chains. Padre Vaz afterwards went to Kandy, where he was well received. Friar Navarette says, in 1669, "there were 3,000 Catholics at Colombo who had no priest among them ever since the Portuguese lost the island. Some of them came on board his ship to confess, and were very devout. They got beads and candles blessed and asked for holy water;" and Tavernier, in his "Recueil de plusieurs Relations," describes their efforts to exclude Christians from Japan. Dutch soldiers were allowed to marry Siṉhalese, but only on the condition of the wives becoming Christians of the Dutch church.[2]

Schools were established to teach Siṉhalese children Dutch, and a fine imposed on parents who neglected to send them. Baron Imhoff, in 1737, established a printing press, where a translation of the Bible, the four Evangels, and the Lord's Prayer were printed in Siṉhalese characters for the use of the natives,[3] and there is a list in the J. R. A. S., (i. 44,) of sixty-two works, principally Biblical, issued by the Dutch when in

[1] Valentyn, pp. 134, 173. [2] Valentyn, p. 195.
[3] Hist. des Voy., xvii. 248 ; Valentyn, p. 409.

Ceylon; but all their efforts to Christianize the natives, as admitted by Baldæus, were useless. (*Vide* ch. xxiii.) Nothing was done to promote agriculture, and rice was imported for their own use from Batavia and India; but many of the fine fruits now naturalized in the island were introduced by them. They were the first to form coffee plantations, and tried to introduce the cultivation of the tea-plant, the mulberry, and the silk-worm, but failed; the latter had been tried by the Portuguese. The Dutch also encouraged the growth of pepper and several species of native dyes,[1] removed obstacles to the navigation of rivers in their territories, and formed canals connecting the southern lagoons. (*Vide* ch. iv.)

Tavernier (1648) says, "the Dutch believed, before they obtained the island, that they would make vast sums of it," and the Company at first called it their most valuable jewel, "Dat Ceylan een Kostelyk juweel van compagnies staat is;"[2] but it did not pay, in consequence of the peculations of the governor and chief officials, who played into each other's hands. Valentyn says, "the governors' income was only £30 per month, yet, in some secret way, in two or three years they became rich" (p. 26). The condition of the natives was worse under their rule than during the time of the Portuguese, habitual oppression being practised by the headmen and other officials. Their minor employés were miserably paid and their soldiers mutinous, and they yielded their "jewel" to the British with far less resistance than they themselves experienced from the Portuguese.[3] "It is remarkable that the language, religion, and manners of the latter remain to the present day, while those of the Dutch are nearly extinct. The Roman Catholic faith flourished in every hamlet where it was planted by the Franciscans, whilst the doctrines of the Reformed Dutch Church, never preached beyond the walls of their fortresses, are already almost forgotten in the island."[4]

The title of "Don" and Portuguese names are frequently

[1] Report of Vanimhoff in Lee's Ribeyro, p. 173.
[2] Edelheden to Van Goens, in Valentyn, p. 148.
[3] Haafner, Mem., p. 350; Report of Van Rheede in 1697; Valentyn, p. 273.
[4] Tennent.

met with in Sinhalese families, even where the bearers are Buddhists, and of which they are very proud. Wolf, quoted by Sir E. Tennent, says, "The title of Don was sold by the Portuguese for a few hundred dollars, the name of the person honoured being inscribed on a thin silver plate presented by the governor. By this contrivance they raised large sums, everyone who could scrape together the amount required buying the title; the Dutch afterwards made poor work of it, selling the dignity for ten dollars." The Tuscans had a similar device for raising money, called "Libro d'oro," in which the names of persons ennobled were inscribed on payment of a certain sum.

According to all accounts, many of the Dutch governors of Ceylon were remarkable for their rapacity and tyranny; although under the orders of the Governor-General of Batavia, they were at liberty to correspond with the Company's Directory in Holland without informing the Governor of Batavia; several availed themselves of this privilege to become absolute in the island, and Peter Vuyst, who was governor from 1729 to 1730, tried to make himself an independent sovereign. Vuyst was a half-caste, and possessed of all the cruelty and energy often found in them. In order to accomplish his ends he ostensibly patronised the native population, and got up a pretended plot in the island against the Dutch rule, when he executed, or confiscated the property of, all the rich and influential persons who were likely to stand in his way, accusing them of being concerned in it; but the Governor of Batavia hearing of his proceedings sent a force to arrest him,[1] and although he fired on the ships from the batteries of Colombo, he was seized and conveyed to Batavia and kept in irons for two years, when he was garrotted, quartered and burnt, his remains being thrown into the sea.

Versluys, who succeeded him, was removed for cruelty and extortion, numbers of natives dying during his reign from starvation, caused by dear rice. A few of their governors, such as Van Goens, Imhoff, and Falk, were of a different

[1] Hist. des Voy., xvii. 216; Commodore Roggewein, in Harris, Coll. Voy., i. 287. Sir E. Tennent makes it 1626.

stamp; the latter did his best to improve the condition of the natives, and removed many causes of complaint among the population.

Captain Percival mentions that "when the British entered Colombo they found in the 'Stadt-house,' or Court of Justice, a rack and wheel, along with a great variety of implements of torture for inflicting punishment on criminals, particularly slaves."

Dutch Revenue.—According to some official documents from the Chamber of Archives at Amsterdam, in the Appendix to Lee's Ribeyro, the Dutch revenue of Ceylon, from 1739 to 1760, shows an average deficit of £14,000 per annum. The same work also gives various reports from the governors of the colony, some of which are in Valentyn. Lord Valentia, who travelled in Ceylon in 1802, and probably obtained his information from Mr. North, the governor, who examined the official documents of the Dutch in the island, says, "their officials not being able to live on their small pay, peculated and falsified the documents in order to deceive the Home Government." (Vol. ii. 309.)

From the report of Governor Imhoff it appears that the revenue in 1740 amounted to £116,300, the chief items at that time being—elephants, £10,000; cinnamon, £12,500; and areca nuts, £12,500. With regard to the pearl fishery, an important source of revenue, the Dutch were rather unfortunate, as they had only four good years during their 140 years' occupation of the island. (*Vide* ch. xxx.) In 1732 the banks were fished bare, and Van Imhoff thought "the whole affair rather glitter than gold, and a doubtful matter whether the Company derived any benefit from the fishery, and compared the whole island to those tulips which bore such fabulous prices without any real value;" but the governor was apparently unaware of the migratory propensities of the pearl fish, for during his successors' time the fishery yielded, in 1747, £21,400; in 1748, £38,580; and, in 1749, £68,000. Besides the fishery the Dutch tried to eke out an additional revenue by the sale of cotton cloths to the natives who attended it.

Cinnamon—was one of the best and most permanent sources of revenue under their rule, as with their predecessors. The Dutch treated the Chalias with such severity, numbers of them, in 1735, sought refuge from their exactions in the dominions of the King of Kandy. The Company tried all their cringing arts on the Raja to induce him to drive them back again without avail, and they were obliged for their own sakes to be more lenient with those that remained; among other things, the Dutch told the Chalias they were born to peel cinnamon as their destiny.[1]

The Chalias had been originally a tribe of weavers, who emigrated from India in 1250 with a party of Moors; but, having incurred the royal displeasure in 1406, they were ordered to peel cinnamon, and formed into a regular organization for the purpose, being bound to furnish the king a certain quantity annually as a tribute, and a few privileges, such as exemption from tolls, taxes, &c., were accorded to them in return. The Portuguese adopted the arrangements of the king with few alterations, and gave each Chalia two parrahs of rice, 12 lbs. of salt, and 24 cubits of cotton cloth per annum.[2]

A code of regulations, drawn up by the Dutch in 1707 for the Chalias, is found in Valentyn. They were each given 180 lbs. of rice annually, and in return obliged to furnish 56 lbs., or a pingo load, of spice gratis. When more than this quantity was required by the exigencies of trade, they were paid for it at the rate of sixpence per pingo, and fined or otherwise punished if they failed to bring what was wanted. The punishments were confinement in chains, flogging, branding, and cutting off their ears. Severe laws were also made in order to preserve the government monopoly in the spice. (*Vide* ch. xxxiii.)

Captain Percival relates, that when the English captured the island they found that the Chalias refused to acknowledge any authority but that of their headmen, and occasionally exercised a petty tyranny of their own; a party of them who

[1] Asiatic Jour., xii. 269, 1833.

[2] Report of Schreuder in Lee, p. 192; Asiatic Jour., 1833, p. 270.

maltreated some other natives at a ferry, by throwing them into the river, were flogged for it, as the ordinary punishment. The Chalias were very indignant, and complained to the governor of this encroachment on their privileges.

Although the English continued to use the Chalia organization for collecting cinnamon, the severity of the code was greatly relaxed by Mr. North in 1802.

Elephants.—Van Imhoff says, in 1740, "The trade in elephants is important; we get annually fifty from the Colombo and Matura district, and fifty from the Wanny." These animals were for a long time an important source of revenue, yielding, up to 1740, from £10,000 to £22,000 per annum. According to Valentyn, the headmen of Matura were obliged to furnish annually thirty-four elephants, of which four should be tuskers; and the Dissaves were instructed to bribe the king to allow tuskers to be driven down to the Company's territories.[1] Navarette mentions that during his stay at Colombo, in 1669, 150 were caught near the sea-shore and sold to the Moors. Twenty-four of them were put into each ship and taken to India. He remarks that they stood the sea well. Le Brun also, in 1704, speaks of 160 being caught in a single corral, close to Galle, while he was staying there.[2] (*Vide* ch. xxiv.)

Areca Nuts.—During the time of the Portuguese this trade was chiefly in the hands of the Moors, who brought the nuts from the interior, and conveyed them to India and the Maldives, where they are largely used for mastication with betel, exchanging them for cloths, which they retailed in the villages and hamlets of Ceylon. But the Company determined to take the business into their own hands. They first adopted the plan of sending arrack to Surat and other parts of India, to exchange for cotton cloth, with which they tried to under-sell the Moors; but not succeeding in this, they prohibited the import of cotton cloth by the Mahometans for retail purposes, and made areca-nuts a government monopoly.[3]

Among the minor sources of revenue were the salt-pans, at Putlam and other places, which they farmed out; the chank

[1] Valentyn, p. 133; Lee's Ribeyro, p. 170.
[2] Travels, p. 331.
[3] Valentyn.

fisheries; a land tax; a tithe on cocoa-nut gardens; and a tax on fish, ferries, iron ore, and jagery.

Haafner mentions (p. 359) that the King of Kandy, in 1766, obtained permission, by treaty, to get as much salt as his subjects required from the Dutch, but they only allowed a certain quantity annually, barely sufficient for the consumption of his kingdom; and having thus got him in their power, stopped the supply of salt whenever he turned restive, and after 1783 refused any longer to present letters to him on their knees. Governor Schreuder, in his report to his successor, Van Eck, 1762, says they derived some profit from breeding horses,[1] but it does not appear to have been continued (*vide* ch. xxiv.), and Imhoff tried to introduce Caramania goats; he was, however, unsuccessful. Choya root (*Oldenlandia umbellata*) and Sappan wood were exported in large quantities. The natives on the coast were obliged to furnish a certain quantity of choya as a tribute, but they discouraged the growth as much as possible, saying it was not so good as that of Malabar. Cocoa-nut oil, coir, and coffee, which now form the chief exports of the island, were then of little note. In 1762 only 100,000 lbs. of coffee were produced. (*Vide* ch. xxxii.—xxxiv.)

English designs on Ceylon.—In 1664 Sir E. Winter, governor of Fort George, Madras, was sent from India in order to obtain the release of many English sailors detained by Raja Singha, who had a propensity for kidnapping and detaining in captivity Europeans shipwrecked or trading on his coasts. Sir E. Tennent (ii. 48) says, "De Foe has availed himself of the habit of the Sinhalese to seize upon foreigners, to introduce an incident in his story of Captain Singleton." But the Sinhalese were not in the habit of detaining strangers; Singha was the only exception, though it has been often practised elsewhere, the most notable instance in recent times being that of Theodore, of Abyssinia.

Sir E. Winter was laudably joined in his endeavours by Henry Draak, the Dutch ambassador at Kandy, who was himself detained there until his death, and they succeeded in obtaining

[1] Lee's Ribeyro, p. 197.

an order from Singha for the release of all the British sailors; but the rebellion against the Raja, already mentioned, occurring just at this time, put an end to the negotiations, and Sir E. Winter returned home unsuccessful.

Among the prisoners thus detained was Robert Knox, who wrote one of the most accurate accounts of Ceylon ever published; but his observations were confined to the interior, where he was kept for twenty years, having been kidnapped at Trincomalee in 1659, along with several sailors, and his father, who was master of the ship *Anne* of London. Knox's father died in captivity, but he succeeded in making his escape to Manaar, in October, 1679, and hence was taken by the Dutch to Colombo, where he was hospitably received. His "Relation" was published in London, 1681, on his return home.

Besides fifty or sixty Dutch, including two or three ambassadors, detained where Knox escaped, there were several Frenchmen, and twenty-nine English.[1] The majority of them eventually settled down in the island, and married native women; except the Dutch, they do not appear to have been very badly treated, and were dispersed among villages in the interior, being furnished with provisions, rice, &c., and allowed to build huts and make gardens for themselves, but were too well watched to escape without running great risks. The Dutch mention that in June, 1680, two of them arrived at their fort of Sitawacca, saying they had been twenty-two years in captivity. They, along with ten others, were carried off into the interior from Calpentyn, when they landed from the Maldives, where they were wrecked.[2] Knox gives an interesting account of their mode of life, but assigns no reason why Singha detained them, except it might have been a desire to force them into his service, to which they objected.

It is not improbable that Sir E. Winter's journey to Ceylon had another motive besides the release of British sailors, and was connected with the then recent treaty between England and Portugal, and the anticipated war with Holland in 1664.[3]

Although the English were a few years before the Dutch in

[1] Sir E. Tennent says there were five ambassadors.

[2] Hist. des Voy., xi. 130.

[3] Russell, Modern Europe, ii. 439.

India, they did not make such rapid progress in forming settlements, and up to this time were fully occupied with their factories at Surat, Madras, and Amboyna ; but they now began to turn their attention towards obtaining a footing in Ceylon. They had, in 1662, acquired Bombay as the dower of the Infanta of Portugal on her marriage with Charles II., and in the marriage treaty, drawn up in 1661, it was agreed (article xiv.), "that if the island of Zeilon should by any means be recovered by Portugal, the king was bound to deliver the port of Galle to England,[1] and the cinnamon trade to be divided between them ;" but as Portugal did not recover Ceylon, the treaty remained a dead letter. Basnage says Portugal made several attempts to regain the island by diplomacy in the time of Mazarin.

French attempt to seize Trincomalee.—The first French expedition to India occurred in May, 1601, when two ships were sent from St. Malo by some merchants of the place, but both vessels were wrecked on the Maldives. Pirard de Laval, who accompanied them, remained some time there, and has written an admirable account of the islands. He subsequently visited India and Ceylon. A small company was formed in 1642, under the auspices of Richelieu, to colonise Madagascar and Bourbon, under the command of Reinfort ; but Madagascar was a failure, and abandoned in 1671, when many of the colonists were massacred by the natives.

The principal French East India Company was established in 1664 by Colbert, to which 3,000,000 of livres, about £600,000, were advanced by Louis XIV., and a factory formed at Surat. Francis Caron, a Dutchman of French origin, after serving the Dutch Company twenty-five years, transferred his services to the French, and was made its Director. He succeeded in inducing Colbert to join in a plan of forming a settlement in Ceylon, being of opinion the Dutch had made a mistake in not making it their head-quarters in the East, instead of Batavia, which was too far eastward, and had not the commanding position of Ceylon. An expedition was accordingly

[2] Chalmers' Treaties, ii. 292. Sir E. Tennent has omitted to allude to this treaty.

despatched, consisting of nine vessels, five being ships of war, carrying 201 guns and 2,050 men, commanded by De La Haye, a French colonel of infantry,[1] and accompanied by Caron, with instructions before proceeding to Ceylon to visit Madagascar, Bourbon, and Surat.

They appeared off Batticaloa, March 21st, 1672, and after a parley with the governor, and taking in water, proceeded to Trincomalee, and entering the harbour, March 22nd, were saluted from the Dutch forts, De La Haye returning the salute.[2] Next day a detachment of marines was landed, and intrenched on the island, at the entrance to the inner harbour. The French commander, careful to avoid any rupture with the Dutch, considered he was justified in landing on the island, which in reality belonged to Singha.

Although the Dutch governor, Van Goens, had been apprised of the French expedition some time before its arrival, and the hostile intentions of Louis XIV. towards Holland, followed by war in 1672, in which England joined, he was not prepared for the fleet's arrival at Trincomalee. Neither the Portuguese nor Dutch had ever troubled themselves much about the place, and had no possession in the bay, except two small forts, named Cottiar and Trincomalee. The latter was situated on a point of land, near an ancient pagoda, destroyed by the Portuguese, who used the materials in constructing it. The modern fort, Ostenburgh, was not built when De La Haye entered, and Cottiar, with some guns, was abandoned the day after his arrival, from want of sufficient force to hold it. Singha sent an envoy on the 25th to welcome De La Haye, who at once despatched three officers, MM. Fontaine, Garde, and Dorgeret, to Kandy, to negotiate with him, the capricious Raja throwing gold chains round their necks at the interview, ready to form an alliance with any opponents of the hated Dutch.

[1] De La Haye was subsequently killed at the siege of Thionville. His account of this expedition, along with Caron's letters to Colbert, was published at Orleans, 1698, under the title of "Voyage Des Grandes Indes." Knox, usually very accurate, says there were "fourteen sail of great ships," p. 184, but the Hist. des Voy. gives them as above.

[2] Relation, p. 153.

On the 17th May a letter arrived from Singha making a donation of the whole bay to the French, upon which De La Haye, who assumed the title of Louis's Viceroi, took possession of Fort Cottiar, and hoisted the French flag there.[1]

Two days previously a Dutch fleet of fourteen vessels, commanded by Van Goens, arrived and anchored off Fort Trincomalee, when a message was sent to De La Haye requesting him to leave. However, both parties remained on the defensive until the end of June, when Van Goen was reinforced by the arrival of some more vessels; after which several skirmishes took place with the French in the bay and the troops Singha had collected along the shore at various points.[2]

Meanwhile sickness and death, caused by the climate and the hard work[3] of strengthening their forts, had so weakened the French crews, more than 400 of them being "*hors-de-combat*," De La Haye thought it prudent not to remain; and, abandoning the enterprise, departed with his fleet for Tranquebar, July 9, 1672, the Dutch being, he says, drawn up in line opposite Fort Trincomalee as the French sailed out of the bay.

De La Haye was greatly pressed by Singha's envoys and the headmen of the vicinity to remain, who said: "their heads would be taken off by the Raja if they let the French go." Offers were made to receive their sick on shore, and Singha himself sent medicines and doctors to attend them; but De La Haye could only promise to return very soon. Before his departure he sent Laisne-de-Nauclairs de Lanerolle, one of his officers, as ambassador to Kandy.

It is strange that De La Haye makes no mention of his having left a garrison of 250 men and one hundred and twelve pieces of cannon in Fort Cottiar, which was soon afterwards captured and the whole made prisoners of war by the Dutch; neither does he give the name of the last ambassador he sent to Kandy, nor assign any other reason for his sudden departure

[1] De la Haye, pp. 178, 218.

[2] Hist. des Voy., xi. 273.

[3] "Les plus forts et les plus robustes ont bien de la peine à supporter l'ardeur d'un soleil perpendiculaire."—P. 183.

than the mortality and sickness amongst his men and want of provisions. But the Dutch tell a different tale, according to the editor of "Prevost."[1] De La Haye was attacked by Van Goens with a fleet of sixteen vessels. Three of his ships captured, and the rest obliged to escape to the Coromandel coast. Knox says the Dutch destroyed nearly the whole of them; but this was probably an invention of the headmen to excuse themselves with the Raja; although there is no doubt Van Goens was more than a match for the French, weakened by sickness. Caron, in a letter written from Trincomalee to Colbert, July 4, 1672, admits the capture, on their return from the Coromandel, of two out of three ships sent there for provisions, and mentions that an officer was left in command of some men at Cottiar.

After De La Haye had refreshed his men at Tranquibar, he captured and lost the Dutch settlement of St. Thomas as rapidly as that at Trincomalee, but eventually founded the French settlement at Pondicherry on the Coromandel coast.

Nauclairs de Lanerolle, De La Haye's ambassador, got into trouble immediately after his arrival at Kandy. Having made the journey on horseback, when he entered the town he rode past the Raja's palace on his way to his residence, a great violation of etiquette. Singha took no notice of this, although he bore it in mind; for, when the day appointed for an audience arrived, he detained the ambassador so long in the antechamber that in a fit of impatience the Frenchman walked off without seeing his Majesty. The attendants at the palace tried to stop him; but De Lanerolle placing his hand on his sword in a menacing manner, he was allowed to pass. When Singha

[1] The name of the ambassador is supplied by the Dutch editor of Hist. des Voy., xi. 129, who says, "N'est-il pas aussi surprenant, que M. Prevost étant en France, ne se soit pas informé de plusieurs circonstances qui manquent à celle de M. De la Haye? Ils nous reste à remarquer que lorsque les Hollandais s'emparèrent du fort des Français il y avoit encore 112 pièces de cannon, avec un garnison de 250 hommes et 120 indigènes, qu'ils firent tous prisonniers de guerre; mais un autre fait, dont il est étonnant qu'on ne parle point ici, c'est que l'Amiral Van Goens qui commandoit une flotte de 16 navires attaqua M. de le Haye dans son poste, prit trois de ses vaisseaux, et l'obligea de se sauver avec le reste vers la côte de Coromandel," xi. 274.

[2] Hist. des Voy., pp. 17, 128.

heard of it he ordered him and his whole suite to be flogged and put in chains. Knox, who relates this affair, says this was done to all except the two gentlemen first sent up to Kandy; and his accuracy is proved by De La Haye, who mentions that Dorgeret returned to him on the 2nd of May.[1]

The ambassador was kept in chains for six months, and all were detained when Knox left: it is not known what became of De Lanerolle, but he was alive in Kandy in 1680.

At the death of Singha, about 1687,[2] the Kandyan throne was successively occupied by Wimala Dharma II. and Siriwira, at whose death, in 1739, the native Siṇhalese line of kings becoming extinct, the brother of the late Queen Siri Wijayo Raja, a Malabar, was raised to the throne. He was succeeded by another sovereign, equally obscure with the preceding, during whose reign, about 1760, the violent and tyrannical government of Schreuder caused a revolt among the lowland Siṇhalese, which induced the Kandyans to join them in a combined effort to expel the foreigners. The Dutch were now obliged to fight, and showed more energy than might have been expected; but the war lasted for nearly seven years, costing them 10,000,000 of florins and many men.[3]

They were at first unsuccessful, Schreuder's repeated efforts to penetrate into the interior being foiled by the Kandyan mode of fighting, and the difficulties of the country covered with dense forests: the few roads or paths, only wide enough for two men to march abreast, were blocked up by felled trees and harrows covered with formidable jungle thorns; numbers of Dutch soldiers were killed from behind trees without seeing an enemy—chiefly officers, who were obliged to wear private uniforms; and when they lit their bivouac fires at evening to cook they were still more exposed to the secret shots of the Kandyans.[4]

Van Eck, Schreuder's successor, succeeded in capturing Kandy, 1765, through the treason of one of the native generals, when the town was sacked and burnt; but the Dutch were

[1] Knox, Relation, p. 184; Relation de la Haye, p. 160; Sir E. Tennent says De Lanerolle was not flogged, he being the only exception.

[2] Hist. des Voy., xvii. 158.

[3] Burnard, Asiat. Jour., xi.

[4] Haafner, p. 355.

soon after surrounded and nearly starved into surrender, Van Eck dying of apoplexy caused by the dangers of his position; when Falk, by a vigorous march from Colombo with more troops, relieved them, and held the place for some months.

Peace was made in 1766, by which the Dutch obtained a considerable increase of territory, the king being frightened into submission in consequence of the Dutch having set up a rival prince, who, when they gained their object, was made prisoner and sent to Amboyna, where he died in captivity.[1]

Second British Embassy from Madras.—Just a century after Sir E. Winter's embassy the British again turned their attention to Ceylon. In 1763 the Governor of Madras sent Mr. Pybus to Kandy to negotiate a treaty; but nothing came of it, from the neglect or indifference of the Indian Government to carry out the project.[2]

Again, on the breaking out of the war with Holland in 1782, Hugh Boyd was sent by Lord Macartney; but the king, piqued at the neglect of the previous treaty, declined to negotiate with any envoy not sent by King George himself. Mr. Boyd, who published an account of his embassy in 1798, describes Kandy as a miserable place, chiefly composed of mud huts; and gives an amusing description of the manner in which the Raja's ministers and courtiers approached his Majesty, literally "crawling all fours on their hands and knees, and licking the dust on the floor of the apartment, which was so dark, the King, who was seated at the further end, could hardly be seen. He was a large black man resembling the portraits of Henry VIII." Dr. Davy says, the knees of the courtiers about the palace at Kandy in 1815, from much practice in this undignified kind of movement, had acquired a thick horny skin. On his way to the palace, Mr. Boyd passed through a semi-circle of forty or fifty elephants drawn up in state, two of them being albinos.

This embassy was accompanied from Madras by a small force, commanded by Sir Hector Munroe, which landed at Trincomalee, and occupied Fort Ostenburgh while Mr. Boyd

[1] Haafner, p. 359.

[2] Lord Valentia's Trav., i. 225; Mill, Brit. Ind., iv. 225.

went to Kandy, the Dutch garrison surrendering. On his return to Trincomalee, he found that, during his absence, Suffrien, the French Admiral, had by a "*coup de main*" made prisoners of the few English left in the place and carried them off. Three days after, a British fleet arrived and defeated Suffrien on the coast, putting more than a thousand of his men "*hors de combat*," with very little loss to themselves.

Haafner, who was living at Jaffna in 1782, accuses Racket, the Governor of the fort, of being in private communication with the Indian Government for the sale of his charge, in the event of the British army making a descent on that part of the island, and sent a plan of the fort to Madras, he, Haafner, being employed by Lord Macartney to convey the plan and letters to General Munroe; but he does not say where the latter was at the time, his account being rather confused. Haafner professed to be anti-English, "poverty alone compelling him to accept Lord Macartney's offer, who promised to give a thousand pagodas in gold for the service," p. 371.

He mentions the commandant of Negumbo as a specimen of Dutch officials, saying, "Je fus invité par le commandant à dîner chez lui . . . il me raconta d'un air satisfait qu'il avoit eté marmiton en Europe, après tête de la maison de Falk, qui pour récompenser ses services, l'avoit nommé commandant de Negumbo." Haafner adds, this kind of promotion was a common occurrence with the Dutch East India Company.

List of Dutch Governors of Ceylon, from 1640 when Galle was captured, to 1796 when the island was ceded to England: from the "Colonial Office List."

Admiral Joa Koster	1640
Jan Theyssen	1640
Joa Matzoyker	1640
Jacob Van Kittensteen	1650
Adrien Vander Meyden	1656
Rykloff Van Goens	1660
Jacob Hustaart	1663
Rykloff Van Goens	1664
Rykloff Van Goens (Junior)	1674
Laurens Pyle	1679
Thos. Van Rhee	1692

G. De Heer	1697
Cornelius Simons	1703
Henrick Beeker	1707
Isaac Rumpf	1716
Johannes Hertenburgh	1724
Peter Vuyst	1729
Stephen Versluys	1730
Jacob Pielat	1732
D. V. Domburgh	1734
G. W. Van Imhoff	1736
W. M. Bruynink	1740
Dan Overbeck	1742
J. V. Van Gollenesse	1743
J. Joa Vreeland	1751
J. De Joug	1752
J. G. Loten	1752
Jan Schreuder	1757
L. J. Van Eck	1762
J. W. Falk	1765
W. J. Vander Graaff	1785
L. G. Van Anglebeck	1794

CHAPTER XVII.

MODERN HISTORY.

British Regime.—In 1795, the British government having decided to take possession of the island, an expedition was sent by Lord Hobart from Madras, consisting of the 72nd Regiment and two companies of the 71st and 73rd Regiments, commanded by Colonel Stewart. They landed August 1, 1795, at Trincomalee, which was taken after a three weeks' siege, the chief incident being the surprise of an English battery directed against the place, by a party of Malays in the Dutch service, who, armed with kreeses and nearly naked, crept out of the fort under cover of night and either killed or wounded every man in the battery. Jaffna, garrisoned only by invalids, surrendered in September, and Calpentyn November 5, to the 52nd Regiment, sent from Negapatam.

After Calpentyn was taken, the king of Kandy, following the traditional policy of double dealing, sent a Dissave, named Megassene, to Madras to negociate a treaty of alliance with the British; while at the same time the Raja was indirectly offering the Dutch assistance, which they declined, distrusting him;[1] but Colombo was taken before his envoy returned from Madras.

Negumbo surrendered without opposition, February 1796; and Captain Percival relates that Colonel Stewart marched his troops, consisting of three European regiments and three Sepoy battalions, hence to Colombo, a distance of twenty miles, along a road one continued defile, intersected by deep and broad watercourses connected with the Kalany ganga, with-

[1] "On apprit indirectement que le Roi de Candie . . . avait offert ses secours pour la defense."—Tombe, ii. 187.

out any attempt being made to stop him. "Nothing," he adds, "could give a more striking idea of the degraded state of the Dutch military establishments in the island: a thirst for gain had swallowed up every other feeling in their breasts, a warning to all commercial nations."[1] Indeed Colonel Stewart must have been privately aware of the intended capitulation of Van Anglebeck, or he would not have brought his troops along such a road when he might have landed elsewhere.

At Mutwall the river forms a neck of land, the only entrance to which is called, from the strength of the position, "Grand Pass," where a battery had been erected. Here Colonel Stewart remained for two days, preparing for serious opposition in crossing the river, several hundred yards wide; when he was informed, greatly to the surprise of the invaders, that the Dutch had thrown their guns into the river and retired to Colombo, alleging they were afraid of being cut off by troops landed from ships in the offing.

Finding the passage clear, the British troops were taken across the river on bamboo rafts; and, soon after it was passed, a party of Malays, headed by Colonel Raymond, a Frenchman, attempted a surprise, but were repulsed after a sharp affair, in which he was mortally wounded.

This appears to have been a spontaneous act of the Malays, as Van Anglebeck, the governor, had meanwhile surrendered Colombo, February 16, 1796, when the English troops marched in and took possession, the Dutch ensign being replaced on the flagstaff by the British.

By this capitulation they acquired the whole of the Dutch possessions in the island, including forts, guns, stores, archives, etc., the garrison marching out with the honours of war. Captain Percival says, when the British troops entered the fort of Colombo they found the Dutch garrison in "an infamous state of disorder and drunkenness; no discipline, no obedience, no spirit, accusing the governor of having sold them. The Malays alone kept discipline at first, but were soon led away and joined the others, and fired several shots into Van Anglebeck's house, crying out they were sold, and

[1] P. 47 88, 92.

spit and struck at the British troops as they marched in." (p. 95.)

M. Tombe says there were only 461 Dutch or Europeans in the place, the remainder being Malays. According to Captain Percival, there were two battalions of Dutch or Malays and one French. The Europeans were conveyed to Batavia, while the Malays entered the English pay.

Never was a place captured with so little resistance. Haafner says the island virtually belonged to England since 1782, the Dutch officials being willing to surrender it; and there appears to be little doubt such was the case, Van Anglebeck's conduct being certainly very suspicious. He allowed the Swiss regiment of De Meuron, whose time of service with the Dutch had expired some months previously, to transfer their services to England, being taken on board British vessels on the coast by the Company's boats and conveyed to Madras. The date is not given, but it appears to have been before the British landed at Negumbo. It is also remarkable that Van Anglebeck should have remained in Ceylon, where he died in 1799. However, in reality, the governor had no alternative but to surrender his charge: the English, having the command of the sea, could easily have landed 10,000 men on the island, while he had only a few mutinous troops to oppose them. Batavia, the only place he could have obtained reinforcements from, was itself speedily captured by the English in 1806. The Stadtholder and his family were refugees in England, and the Dutch Republic, although an ally of France, could give no aid. In 1785, the government of Holland, becoming weary of the expense of maintaining a garrison in the island, had, in advance of the ideas now so much in favour in England, thrown the burthen on the Company, who were told they must defend themselves;[1] and, at a great expense to the colony, three regiments were raised for the purpose, chiefly composed of Swiss and other mercenaries, who were not to be relied on. The island, thus denuded of a proper garrison, became an easy prey to England.

M. Tombe openly asserts the treason of Anglebeck. He des-

[1] Burnard, Asia. Jour., 1821.

cribes "the ostentatious preparations made for the defence of Colombo after the capture of Trincomalee, it being intended to concentrate their forces at the capital, but all the while Van Anglebeck intended treason. English frigates were allowed to come within gunshot of the batteries without being fired at, orders having been given by the governor to this effect, who also held frequent interviews with a Major Agnew, an English agent, who landed in a small boat by himself from a frigate in the offing, 'et mangea journellement chez le gouverneur.' During these interviews the departure of the Swiss regiment was arranged." M. Tombe admits that part of them were in a mutinous state at Galle the previous September, and flogging resorted to to quell it. "Il y eut des murmures de la part des deux compagnies du régiment de Meuron à Galle; ils furent appaisés par quelques coups de bâton." He also says "Toutes les troupes étaient tellement indignées contre le gouverneur que si le Colonel anglais ne lui eût envoyé un sauve-garde il en eut certainement été la victime" (p. 214); which confirms Captain Percival's statement. M. Tombe adds, Van Anglebeck afterwards committed suicide. Cordiner describes his funeral as taking place by torchlight through the streets of Colombo, his body being deposited in a family vault by the side of his wife, whose skeleton was seen through a glass in the cover of the coffin (i. 36).

Two days after the capitulation of Colombo, ambassadors arrived from Kandy to compliment the victors; and, although received with the usual honours, they complained bitterly of their treatment, compared to their receptions during the Dutch time, and especially that they got no presents.[1]

When Ceylon became an English possession, Mr. Pitt was anxious to bring it under the direct government of the Crown; but it had been captured by the East India Company, and it was uncertain from the negociations for peace at Lisle[2] in 1797,

[1] Tombe, p. 185–191.

[2] Lord Malmesbury's diary and correspondence (vol. ii.) shows that during the negociations at Lisle the restoration of Ceylon to the Batavian Republic was the chief object of dispute. The Dutch government informed the French Directory "qu'il ne peut jamais consentir à céder à l'Angleterre Ceylan ni Trincomalee, qu'il regarde comme la source des riches ses du pays et la clef des autres possessions

that it would not be restored to Holland; being only finally ceded to England at Amiens, March 27, 1802. Mr. Andrews was therefore sent from India with extraordinary powers to govern in the name of the Company. He swept away at once all previous customs, laws, and taxes, substituting the Madras system. Indian Dubashees, described as enemies to the religion of the Siṉhalese, and strangers to their habits, were appointed in place of the native officers, who were removed, and the revenue farmed out to Moors,[1] Parsees, and Chetties from India, whose cruelties and exactions speedily drove the Siṉhalese into revolt, secretly encouraged by the Dutch settlers, who promised French aid.

The revolt was soon suppressed by the Sepoys and Colonel De Meuron sent by Lord Hobart from Madras, with a commission of inquiry to pacify the natives. This decided Pitt to make the island a dependency of the Crown, and the Hon. Frederick North, afterwards Lord Guildford, was appointed governor 1798.

Mr. North has left an account of his government in the Wellesley MSS. in the British Museum,[2] containing his letters to the Marquis of Wellesley, Governor-General of India, and other papers connected with the island, which, previously to Sir E. Tennent, had not been examined by any writer on Ceylon, and throw a new light on the events of that time. The old native and Dutch system which had been so suddenly abolished by Mr. Andrews, was restored on the recommendation of Colonel De Meuron, and the Dubashees sent back to India. Yet Mr. North wrote, "No system could be imagined more directly hostile to property or industrial improvement; but the inveteracy of habit, most remarkable in Eastern races, prohibits all but a gradual change, and he was obliged unwillingly to retain it until time enabled a better system to be gradually introduced."

qui serait rendre l'Angleterre maîtresse de l'Inde."—M. Pein to Maret. It is a pity, if they valued it so highly, they did not keep a better garrison in the island.

[1] Lord Valentia's Trav., i. 315; Letter of Mr. North, No. 13,866, p. 28, 58.

[2] Additional Catalogue, No. 13,864.

The peculations of the Madras officials had nearly ruined the finances. He gives details of the plunder of government to the extent of 60,000 pagodas by one gentleman who had charge of the pearl fishery: another by his exactions drove more than 4,000 of the inhabitants from the Wanney district, and the total loss to the Government could not have been less than seven lacs of pagodas."[1] Again he says, "If the Madras Government allows all your ragamuffins upon my island, I shall be either obliged to leave it or turn a Nero."

Another difficulty arose in consequence of the Dutch tribunals having been allowed by the articles of the capitulation of Colombo to administer justice for a certain time, which elapsed before all the suits were finished; and they refused at the expiration of the time, as subjects of Holland, to take an oath of allegiance to England, or accept a renewal of office, expecting a restoration of Dutch rule in the island. Mr. North was therefore obliged to send to Bengal for legal assistance in forming new Courts of Law, and his government was very successful in the internal administration of the colony.

In 1798 the Kandyan adigar, or prime minister, Pilame, placed Sri Wickrama, a youth eighteen years of age, and nephew of the king's wife, on the throne. It is not known what became of the old king Rajadhi; no particulars are given of his fate, only Mr. North says, "The deposition was the work of our friend Pilame." No sooner was this accomplished than the adigar sought and obtained several interviews of a confidential nature with the governor's secretary, during which he disclosed his desire to displace the young king and the Malabar dynasty, which he hated, and restore in his own person the native dynasty from which he professed to be descended.[2]

Mr. North thought this project a good opportunity to establish a British protectorate of the Kandyan provinces, similar to those in India; and after a number of interviews between Mr. Boyd, the government agent, and the adigar, in which the latter showed himself an adept in diplomacy, it was arranged

[1] Letter, Aug. 21, 1799, p. 173.
[2] Letters, No. 13,866, p. 55.

that the king should be retained in his position, but Pilame to possess all the power, and be maintained in his place by a British force. The governor appears to have agreed to the plan as an alternative, having satisfied himself, from the language and designs of the adigar, which he very frankly disclosed, that the king would be either murdered or stimulated into a war against England by Pilame, and thought this the only way of preventing either event. The adigar asked what would be considered a sufficient aggression by the governor, and hinted that the king might be induced to attack the British on account of Mootoo Samey, a claimant to the throne, then a refugee in Cólombo. Mr. North says, "I am persuaded the troops' presence in Kandy will be the only means of preserving the poor man's life and dignity, which would otherwise be sacrificed to the ambition of his minister." [1]

The project was to have been effected by means of an embassy ostensibly to negociate a treaty with the king, General MacDowall to be the ambassador and commander of a large force as his escort, the adigar undertaking to obtain the king's assent to their entrance into Kandy: "he was to be asked to allow 1,000 men to escort the general, which in reality might consist of perhaps 2,500 men." The ambassador and his escort, consisting of half of the 19th and 6th Regiments, a detachment of Malays and native troops, and a battery of Bengal artillery, accordingly set out on the 16th March, 1800; but the king becoming alarmed when they reached his frontiers, they were stopped by his orders, and only a small portion allowed to proceed with General MacDowall to Kandy. The patience of the ambassador on his arrival was exhausted by delays, and declining to comply with the humiliating court ceremonies, which required that he should kneel before the king to obtain an audience, he eventually returned to Colombo without accomplishing anything.[2]

[1] Letters, No. 13,867, p. 76.

[2] The march of the escort from Colombo is minutely described by Captain Percival and Cordiner (ii. 287). There is also an account of it in the MS. of M. Joinville, who accompanied the expedition as naturalist and artist. A detailed account of the humiliating ceremonies through which the Dutch Ambassadors

The adigar, thus foiled in his plan, tried to provoke a war by aggressions on British territory, and plotting insurrections at Colombo, Negumbo, and Manaar, which were soon quelled. He also alarmed the king by telling him the 5,000 British troops assembled at Trincomalee in 1801, under the command of Colonel Wellesley, intended for the capture of Batavia, were designed for the invasion of Kandy, which force was soon after sent to Egypt, under the command of Sir David Baird.

At length, in 1802, a party of Moorish traders, British subjects, returning from Kandy, were forcibly deprived of their property by the agents of Pilame,[1] acting in the king's name, and the compensation demanded by the governor being evaded war ensued; when General MacDowall, with a force of 3,000 men, consisting of the 19th and 51st Regiments, Malays, and native troops, took possession of Kandy, from which the king and most of the inhabitants had fled, after setting it on fire. The governor, in concert with the perfidious adigar, who managed to deceive all parties, then proclaimed Mootoo Samey king, who agreed to accept a subsidiary force, and ceded the province of the Seven Corles; but the Kandyans held aloof, and the new king remained in his palace, only retained in his position by the presence of the British garrison,[2] while the fugitive king, still supported by the Kandyans, maintained a desultory war round the capital. In this dilemma, the adigar proposed to surrender the person of Sri Wickrama, on condition that he should himself hold the chief power at Kandy, with the title of "Ootoon Kumarayea" (Grand Prince), while Mootoo Samey was to be sent to Jaffna, and receive a pension.

In an evil hour, this humiliating proposal was agreed to, and General MacDowall returned to Colombo, April 1st, 1803, leaving behind him 300 men of the 19th regiment, and about 700 Malays, as a garrison.

The unhealthy climate speedily prostrated the handful of Europeans, and the hospitals were crowded with the sick and

passed at the Kandyan court, and the proposed alterations more becoming a British envoy, will also be found in Cordiner.

[1] Lord Valentia's Trav., i. 277, 300.

[2] Idem, i. 298.

dying; seeing which, the adigar formed the bold design of seizing the person of Mr. North, exterminating the remnant of the British garrison, destroying the rival kings, and founding a new dynasty in his own person. Mr. North, who was invited to an interview at Dambedenia, about fifty-six miles from Colombo, was saved by the accidental arrival at the place of a detachment of Malays.[1]

On the morning of the 24th of June, thousands of armed natives suddenly surrounded Kandy and attacked the garrison commanded by Major Davie; who, after a sharp encounter, in which he lost many men, was compelled to capitulate, and allowed to march out on the road to Kandy, retaining his arms, and accompanied by Mootoo Samey, but leaving his sick, numbering 150, and stores behind. The garrison was so reduced by sickness, that when they were attacked, on the 24th June, there were only twenty European soldiers and fourteen officers fit for duty, 250 Malays, and 140 Lascars.

The retreating remnant of the garrison had proceeded about three miles, when their further progress was stopped by the Mahavilla ganga, then greatly swollen by recent rains, no provision having been made for its passage in the articles of the capitulation. Meanwhile the force was surrounded, and Major Davie, instead of boldly cutting his way through his contemptible enemies, which he might have done, first surrendered Mootoo Samey, whom he was bound in honour to protect, and then capitulated himself, surrendering his arms, which he never should have done under any circumstances No sooner were the arms given up than the whole party were immediately massacred, being marched two by two into a narrow defile, and despatched in detail by blows from behind given by Kaffirs in the Kandyan service, the sick in the hospitals at Kandy afterwards sharing the same fate.[2] Major Davie was spared, and Cordiner says Lieutenant Humphrey

[1] Cordiner, ii. 201. According to other accounts the governor took an escort with him, suspecting some treachery, which is most probable.

[2] As usual in such cases, there are several versions of this awful affair, differing in the details. As soon as Mootoo Samey was so cowardly surrendered, he was taken before the king and immediately killed.

escaped by jumping down a bank along with a doctor, and arrived some time after at Colombo; but the doctor was captured and died a prisoner in Kandy. Major Davie is supposed to have resided some years after as prisoner in the neighbourhood of Kandy with a native woman, and to have died in the year 1810, without having had an opportunity of giving any explanation of his conduct. Of the rank and file, only one man escaped, named Corpōral Barnsley: after receiving a desperate cut across the back of the head, he rolled down a bank, and was hid in the underwood, from which he succeeded in making his way through the jungle, and, assisted by some natives, in reaching Fort MacDowall, where Captain Madge and a few men were posted, who escaped to Trincomalee by abandoning his sick. Barnsley's interesting narrative is given by Dr. Marshall, who has written the best account of the military operations of the time. Dr. Davy also has given a number of details of the events, obtained by personal enquiry from the natives, from which it appears the massacre was the work of the king, and not of the adigar (p. 313). The massacre at Kandy was immediately succeeded by a general attack on all the English posts in the island, which was easily repulsed: the savage king himself, with a large army, got within eighteen miles of Colombo, where his followers, armed with the muskets of the British soldiers killed at Kandy, were driven back and the weapons captured. Lord Valentia relates that at Chilaw sixty Sepoys, in a slight entrenchment, kept at bay 3,000 Sinhalese. The subadar told him they had no ball cartridge, but fired "pice" (small copper coin); and, as he did not like to waste them, sometimes used only powder, which answered just as well in keeping them off.

As may be imagined, great was the consternation and desire for vengeance among the Europeans at Colombo when the news of this disaster arrived; but nothing could be then done to avenge the treacherous cruelty of the Kandyans: the garrisons of Colombo and other sea-ports, reduced by sickness, were barely sufficient for their protection; the mortality at that time among the European soldiers in the island was excessive. Three hundred men of the 51st Regiment died in a few weeks

in Colombo of jungle fever on their return from Kandy with General MacDowall.

Mr. North applied to the Indian Government for 3,000 men to take vengeance. The war with France in 1803 prevented his obtaining them; but as many Kandyan villages, hamlets, and rice fields as could be got at on the frontiers, were burnt and destroyed. One effort was made in 1804 to reach Kandy by an advance from several points on the coast, but the intended expedition was abandoned at the last moment. However, Captain Johnson, to whom they forgot to send orders not to march, succeeded in reaching Kandy from Batticaloa with a force of eighty-two Europeans and 250 Malays, where he remained for three days before he fought his way back to Trincomalee, October 20, 1804, with a loss of only ten British soldiers, and six wounded, one of the most brilliant military achievements on record;[1] and clearly showing what Major Davie might have done if he had not so sadly wanted the capacity and courage necessary. Major Forbes, in his account of Ceylon, says he was informed by one of the chiefs who was engaged personally in harassing Captain Johnson's retreat, that the natives were impressed with the idea, that he "must have been in alliance with supernatural powers, for his judgment and energy, superior as they were, were insufficient to account for his escape through one continued ambush" (i. 41).

Sir E. Tennent calls the negotiation with the adigar a "disreputable intrigue," and implies that the governor should have denounced the treason of the minister to the king, but omits to state some circumstances which considerably extenuates Mr. North's policy.

The native dynasty became extinct in 1739, at the death of Siriwira Prakrama; the last three kings were pure Malabars, relations of his queen, and the last of them, Rajadhi, left, it is said, no heirs. There were, as usual, several claimants, among whom was Mootu Samey, the refugee at Colombo, proclaimed king by the British in 1803, who was brother to the late king's chief queen, and had a prior claim to the youth selected by

[1] Captain Johnson wrote and published an account of his "Expedition to Kandy," London, 1810.

the adigar, who was, according to some accounts, nephew of the second queen, and according to others son of a mistress. The governor in his letters mentions that there were three claimants besides the adigar, one resident at Colombo, one at Tutocorin, and another at Jaffna, who had proposed to him, that, if he was established at Kandy as king by British arms, he was willing to become a vassal of England, but Mr. North declined the proposal. This being the case if the adigar according to Kandyan usage had the power and the right to name whom he pleased, he had likewise the power and right to transfer the sovereignty to England, if he chose; which is what in reality he proposed to do, in order to secure to himself a permanent lease of power and the wealth he possessed, which he well knew were in jeopardy under a native ruler, from the ambition of rivals or caprice of the king. On looking at the list of Ceylon sovereigns, it will be seen that many of them were nominees of the minister, and in several instances the ministers placed themselves on the throne, and Pilame would probably have done so himself at once, only he would thereby have incurred the hatred of the other chiefs, and become the victim of plots and conspiracies directed against him.

Mr. North was not in any way called upon to inform the nominal king of the adigar's designs. No permanent tranquillity or prosperity was to be expected in the island while a savage and cruel power ruled in the interior, animated with a fanatical hostility to strangers, and ever ready to intrigue with other foreign powers, to displace those already in the island, which has always been the Kandyan policy, and who, securely intrenched in their mountains, continually kept the maritime districts in a state of alarm, and necessitated keeping a larger garrison than would otherwise have been necessary. This was a favourable opportunity to establish British supremacy in the island, and relieve the Kandyan people from the cruelty of their rulers, a fact that could not have been very long delayed, which was proved by the permanent occupation of Kandy less than fifteen years after, only it would have been a better course to have marched boldly to Kandy, and have taken possession of the vacant throne instead of entering into any

negotiations with the adigar. The great fault of all those engaged in this terribly ill-managed Kandyan affair was placing any reliance on the word of an Asiatic, or entering into any negotiations or conventions with them, in which Europeans are sure to be foiled by their superior finesse and want of faith. In dealing with these people there is only one policy to be adopted, a bold, straightforward one, with a firm reliance on your own right arm, and a good display of physical force—the only argument they understand, or at least are likely to attend to.

Mr. North's letter to the Marquis of Wellesley, in which he mentions the various claimants to the throne, is as follows: "A fourth pretender has started up at Jaffna who anathematizes the one at Tutocorin, the one here, the present king, and the adigar, and offers in the same way to hold his crown as a tributary dependent, which I have also declined. . . I have given the adigar to understand that I shall consider him as responsible for the king's life. As to his dignity I will never combine to take it away; but if he loses it I shall consider it as little my business as I did when he usurped it. Should the adigar succeed in dethroning him without any concurrence of mine, I suppose that you have no objection to having the said adigar as a vassal."[1] It appears from his letter, dated February 16, 1800, that Mr. North's policy met with the approbation of the Governor-General of India.

The state of semi-war and blockade of the Kandyan provinces, which was kept up after the events of 1803, proved so onerous to the resources of the colony, that Mr. North became very anxious for peace; and having been informed the Kandyans made no overtures, because they expected they would be required to pay large sums as compensation for their atrocious conduct (p. 287), "he sent a private message to the king, through the high-priest of Kandy, saying, all the governor required was not treasure or territories but satisfaction for the horrid crime he had committed; but the only reply was a refusal, on the ground that the Kandyan massacre had been perpetrated by the adigar, from whom he had long since withdrawn his confidence. Mr. North attributed the haughty demeanour of the king to an expectation of aid from Linois,"

[1] No. 13,867, p. 69

the French admiral then cruising in the Indian Seas, having escaped from Pondicherry with one sail of the line and three frigates, but who was signally defeated by the China fleet of East Indiamen, under the command of Commodore Dance, February 14th, 1804.[1] The long-deferred retribution was brought about by the king himself, who soon became a sanguinary despot, continually disturbed by the plots and insurrections of his chiefs. The crafty and plotting Pilame was detected in an attempt to assassinate the Raja, and beheaded in 1812. His nephew, Eheylapola, who succeeded him in his office, the dignity of adigar being hereditary, also inherited his disposition for plotting, and soon formed a new conspiracy, secretly soliciting Sir R. Brownrigg, the then governor, to aid him in dethroning the king, but he declined; the conspiracy was discovered and extinguished in blood. The new adigar succeeded in escaping to Colombo, 1814; but the tyrant wreaked his vengeance on his wife and family, and every person within his reach, the place of execution at Kandy flowed with blood, and the neighbourhood echoed with the shrieks of the victims. Eheylapola's wife and four children, and his brother and wife, were either beheaded or drowned, and the mothers were compelled, under the dread of being disgracefully tortured, to pound the decapitated heads of their children in a paddy pounder. These scenes, too horrible to describe, are minutely detailed in several works on Ceylon.[2]

The savage next seized and mutilated some natives, British subjects, who had entered his territories to trade, and were driven back to Colombo with their several members hanging round their necks. In consequence of this and other outrages war was proclaimed against him in January, 1815. In a few weeks Kandy was again in possession of the English, and the Raja a captive in Colombo, from whence he was transferred to the fortress of Vellore, in the Madras presidency, where he died in captivity, 1832, leaving one son, born at Vellore, who died a few years after.

Sri Wickrama is described as not being unprepossessing in

[1] Alison, Hist. Europe, ch. xxxvii.

[2] Davy, ch. v.; Knighton, 1848; Sirr, 1850; Marshall, 1846.

appearance, except when he was excited, when his eyes gleamed with the fire of a demon, and his face assumed an air of malignant cruelty; his features were good, and the general expression intelligent; he was tall and well made, but rather stout, with a clear dark-brown complexion and a profusion of black hair, and wore a number of costly jewels.

The rapid success of the British was in great measure owing to the defection of Mollegodde, the king's general, and other chiefs, who, disgusted with their master's cruelty, went over to the English; and Eheylapola's followers captured Wickrama, who had fled to the jungle, and delivered him up to the British.

An account of the captive and his demeanour after his deposition is contained in a pamphlet published in London, 1815, under the title of "A Narrative of Events which have recently occurred in Ceylon, written by a gentleman on the spot." The materials appear to be identical with those in the 25th chapter of Philalethes's History of Ceylon, and evidently written by the same person.[1] The king is said to have remarked, "Your English governors have one advantage over us kings, they have counsellors near them who never allow them to do anything in a passion, but unfortunately for us the offender is dead before our resentment has subsided" (p. 180).

In March, 1815, a solemn convention of native chiefs was held in the great hall of the Palace at Kandy, when the king was deposed and his dominions conferred on the British crown, which guaranteed to the chiefs their ancient privileges and powers, the impartial administration of justice, and the maintenance and protection of Buddhism. What the ulterior intentions of the chiefs were in these proceedings it would be difficult to discover; the people displayed the usual Eastern indifference to a change of rulers, evidently regarding it as the thing of a day to be followed by another change. Dr. Marshall, who was present on the occasion, says, "They did not even leave their ordinary occupations to look at the troops who were assembled in the great square before the palace. Apparently they regarded the transfer of the government

[1] Tennent, ii. 90

from an Oriental to a European dynasty with perfect unconcern" (p. 163). Both chiefs and people soon began to show signs of impatience, and openly wished for the departure of the British from Kandy, inquiring when they intended to leave the country: "You have deposed the king," said one, "and nothing more is required, you may leave us now." They showed no dislike to us individually, but as a nation they abhorred us; they made no complaint of misrule or oppression, simply wishing we should leave the country.

These feelings broke out in open revolt in the autumn of 1817, secretly fomented by Eheylapola, the professed friend of England, who was disappointed that the crown had not been conferred on himself when the king was deposed; but the government discovering his proceedings, he was seized and transported to Mauritius, where he died in exile, 1829.

The revolt soon spread throughout the Kandyan provinces, many chiefs of importance joining in the movement. A pretender to the throne was found in the person of a Buddhist priest, who changed his yellow robes for the regal garments; and the "dalada" taken from the temple at Kandy shown to the people, to arouse their fanatical enthusiasm.

In the desultory guerilla campaign which followed for nearly ten months, the troops, chiefly Sepoys, suffered greatly from the harassing nature of the war through damp malarious jungles, losing, it has been estimated, 1000 men, a fifth part of the whole force engaged, principally from fever, wet, and leeches.[1] Dr. Davy, who was in the campaign, describes their encountering exactly the same obstacles as the Dutch in Schreuder's war (*Vide* ante, p. 339). The Kandyans never met their enemies openly, gave quarter, or showed any mercy, to those who fell into their hands, and the army imagined "they would eventually be obliged to evacuate the country and fight their way out of it."

At length the Kandyans began to show signs of submission in consequence of the destruction of their villages, cattle, and crops, and the loss of nearly 10,000 persons among them from famine, fever, and war. Disunion also showed itself among

[1] Davy, p. 331.

the chiefs engaged in the revolt; some made overtures of submission, while others were taken and executed. The accidental capture of the "dalada," which was brought back to Kandy, also contributed to the restoration of peace, "an ancient tradition recording whoever possessed it should govern Ceylon." [1]

The lowland Sinhalese took no part in the insurrection; after the disturbances of 1797 they soon became aware of the advantages of the British rule, to which they remain firmly attached, but not so with the Kandyans, whose secluded position in the mountains kept them more under the influence of the Buddhist priests, who were discontented with the Europeans, and many of the proud chiefs of the interior also hated the English, principally for their levelling ideas, and not properly appreciating caste and the privileges it confers; who think nothing of asking a number of low caste people to dinner when the high caste chief is expected to sit at the same table with them.[2] These have continued to plot against the British rule ever since. Plots were discovered in 1820-23-30. In 1835, a conspiracy was formed to invite all the English officers of the garrison to a banquet, where they were to be served with drugged wines, and then knocked on the head; meanwhile, the soldiers, liberally supplied with arrack, were expected to waver in their allegiance under its influence. Six chiefs of high rank were concerned in this affair, and tried for high treason, but acquitted for want of evidence. Again, in 1843, Chandrayotte, a priest of Badulla, made an attempt to set up a pretender to the throne; they were both captured with their followers, tried, and convicted of high treason. The most serious of all was the insurrection of 1848, described further on.

Sir Robert Brownrigg, the governor, soon after the revolt of 1817, availed himself of this outbreak to alter the terms of the "convention of 1815," which the chiefs had broken by their revolt, and as the Buddhist priests had been the chief instigators of it, they were punished by the withdrawal of the engagement "to maintain and protect the temples and reli-

[1] *Vide* chap. xxiii.

[2] *Vide* chap. xix.

gious buildings of the Buddhists, which had been declared inviolate;" in future it was only engaged to give them the respect which in former times had been shown them. The administration of justice was also transferred from the chiefs and headmen—who hitherto were the real rulers of the interior — to European civil servants, and government reserved the appointment of the district headmen employed in collecting the revenue, who were henceforth remunerated by fixed salaries instead of contributions from the people; and still further to emancipate the Kandyans from the control of their chiefs, the "Raja karia," or right to compulsory labour, was transferred to government, and limited to the construction of roads and bridges, or other public works, being altogether abolished in 1832.

In lieu of personal service, a tax of one-tenth was imposed on the produce of the rice lands, and other changes made tending to modify the old feudal principle which had for so many centuries prevailed, the chiefs often oppressing their serfs with corvees and taxes, discouraging any attempt at gain on the part of their dépendents and tillers of the soil, which would have rendered them less subservient, in which they were aided by a national dislike on the part of the Kandyans to any kind of trade, or to sell their produce,[1] if they had any at their disposal, for money, customs consecrated by time immemorial. The cultivators paying their rents in kind, and in many cases receiving from the proprietor only a small share of the produce, the headmen thus became the sole possessors of nearly all the grain and provisions of the interior. Their ambition was not money, but increase of dependents and followers, each chief's importance, and the awe with which he was regarded, being measured by the number of his retinue; this was only to be obtained by the possession of land, which was accordingly the great object of their ambition.

Although the power and privileges of the chiefs had been considerably curtailed by the new laws, domestic slavery was

[1] Knox mentions that the Kandyan chiefs discouraged their people from keeping cattle or rearing poultry.—P. 87.

still retained, and they managed to evade in many instances the other regulations, the efforts of the government for a long time being of little use, the ignorance and prejudices of the lower order of Kandyans, and their passive habits, rendering them at first indifferent to the changes in their favour, to which they eventually became fully alive. One or two of the headmen also, in 1838, voluntarily liberated all their slaves, for which they were rewarded with a valuable gold medal and chain, presented to them with some ceremony by the governor, Stewart Mackenzie, at Government House, Colombo. Domestic slavery was not, however, altogether abolished until 1843, by an order from England. Mr. Bennett quotes some returns published in 1835, from which it appears there were then 27,397 slaves belonging to native chiefs in the island, and remarks the strangeness of England paying £22,000,000 to abolish slavery in the West Indies and permitting it to remain in Ceylon (p. 17)

It is very remarkable that neither the Portuguese nor Dutch should have made any attempt to make roads into the interior, which would have enabled them effectually to subdue the lawless kings of Kandy. They might have taken a lesson from the Romans, those great conquerors of antiquity, one of whose first objects towards the conquest of a country was the formation of military roads; for instance, those they made in Britain. Cordiner and Percival both state that when the British arrived in the island the few roads in the interior were merely beaten tracks through the jungles, and the greatest difficulty was experienced by General MacDowall in taking some six-pounders to Kandy in 1802, pioneers being employed to make a way for them in many places, but "the indomitable mountains of the Kandyan provinces, which had long inspired their kings with an audacious confidence in their own security, from which they had looked down with scorn and defiance on their enemies in the lowlands,"[1] were now destined to yield to the pickaxe and shovel of the pioneer. Soon after the capture of Kandy, in 1815, "the governor formed the project of giving permanence to his conquest by constructing a highway between

[1] Tennent.

the interior and the coast. The realization of this plan was delayed by the rebellion of 1817, but Sir Edward Barnes, who succeeded Sir Robert Brownrigg in 1820, applied all the resources of the government to the purpose, and made a military road, unsurpassed in excellence, into the heart of the Kandyan territory, reaching an altitude at Newera Ellia of 6,200 feet above the sea; and this was not all. Before Sir Edward Barnes left the island, every town of importance was connected with the coast by a road, and Colombo nearly joined to Trincomalee," thus for ever altering the nature of Kandyan warfare, and rendering any resistance on their part useless; of which they soon became convinced, and recalled to mind an ancient legend, " that no foreign power could retain the Kandyan dominion until a path should be made through the mountain," alluding to the tunnel cut in the rock at the Kadugannava Pass, where the road winds in a wonderful manner up the steep mountain side. There are several versions of the prophecy, which was probably invented to suit the occasion when the natives saw the road accomplished. General Barnes was very popular with the Sinhalese, perhaps more so than any other governor. There was a sort of Asiatic magnificence about everything he did that attracted them.

In 1833 Parliament conferred a charter on Ceylon, regulating the administration of justice, and granting a legislative council, now consisting of fifteen members, chiefly selected by the Crown, to represent the different interests and nationalities, and over whose deliberations the governor possesses a veto, and power to overrule them when necessary. There is also an executive council, comprising the governor, the three chief civil officers of the colony, and the commander of the troops, which forms part of the legislative council.

Insurrection of 1848.—In the month of July of this year the Buddhist priests, supported by several of the Kandyan chiefs, taking advantage of the dissatisfaction which existed among the natives in consequence of some new taxes on shops, dogs, and guns, also the requisition of six days' labour each year from every adult male, or the sum of three shillings in money,

to be applied in the formation of roads in the district of the contributors, succeeded, by their misrepresentations of these measures, in inducing a number of their ignorant followers in the Kandyan provinces to join in an attempt to restore a national sovereignty, and proclaimed a supposed descendant of Raja Singha, King of Kandy, at Dambool, on the morning of the 28th July, amid great rejoicings and the firing of volleys; hence the insurgents, about 4,000 strong, marched to the town of Matele, a little to the northward of Kandy, where they drove out the police, destroyed the magistrate's residence, and burnt the bazaar. Detachments of the 15th Regiment and Ceylon Rifles, under the command of Captain Lillie, were promptly despatched to the scene, and a skirmish soon took place, in which the insurgents were routed with the loss of six killed and several wounded, of whom eight were captured. They were next driven from a bungalow, of which they had possessed themselves on a coffee estate at Wariapoola, where the palanquin of the pretender was found, and broken in pieces by the Malays, the retreating insurgents then obtained possession of Kurnagalla, about twenty-five miles from Kandy, where they broke open the jail and liberated the prisoners; they also burnt the bazaar and plundered the official buildings, destroying the records, and were in the act of breaking open the treasury chest when a detachment of two officers and thirty men of the Ceylon Rifles entered the town, who routed them with a loss of twenty-six killed and twenty prisoners; returning two days after, 4,000 strong, they made two or three attempts to capture the town, but were easily repulsed, with a further loss, while the Rifles had not a single casualty on either occasion.

Meanwhile a government reward of £150 was proclaimed for the apprehension of the pretender, and the Kandyan districts placed under martial law. The defeated insurgents at Kurnagalle, accompanied by the pretender, retreated to Dambool, but being closely pursued dispersed into the jungle, where their leader remained some time in concealment. Early in August his brother, who had assumed the title of King of the Seven Corles, was captured, along with his adigar and

several followers. This aspirant to royalty was shot by sentence of court-martial the day after. Several hundred prisoners were also captured in different places, of whom 120 were tried by court-martial, eighteen shot, thirty-two imprisoned for various terms, twenty-nine suffered corporal punishment, and the remainder acquitted.

There were also some civil trials for high treason in the town of Kandy, which was not included in the martial law, resulting in various terms of imprisonment to the offenders.

Although several parties were on the track of the chief pretender he was not taken until the end of September, being then found in a cave among the jungle near Matele. He was tried two months after at Kandy for high treason, and condemned to death, but the sentence was commuted to transportation for life and a public flogging in Kandy. This man, who appeared to have nothing of the hero about him, and little suited to play the part he undertook, begged in an abject manner to be liberated, saying he was forced by his followers to assume the title of king, having been dressed up by them as such against his will, and urged in extenuation that he had prevented much plunder and bloodshed among his partisans.

When the new taxes were first promulgated tumultuous scenes occurred in several parts of the island, large numbers of natives proceeding to the government agents of the districts and demanding their withdrawal, and a general effervescence prevailed. Sir E. Tennent was sent on a tour through the provinces to explain their nature to the headmen, to remove the erroneous statements in circulation, and hold them responsible for the tranquillity of their respective districts. In most places this was successful, and the effervescence subsided, especially in the maritime districts, refusing to join in the insurrection which took place afterwards.

It was explained to the natives that formerly they were obliged to give to government four months' work in each year for road-making, and could not now complain as a hardship being obliged to work six days in the year. They had been led to believe that it was the restoration of the old "Raja

karia," which was abolished in 1832; but it may be asked why was forced labour abolished to be afterwards reimposed? Why did government give up their useful and necessary privilege in 1832, without which none of the roads and other public works so beneficial could have been executed? The absolute necessity of the law was proved by the government being obliged to return to it, and the abolition should at least have been only gradual.

The insurrection of 1848, and the events connected with it, led to the appointment of a Committee of the House of Commons to investigate the affair, and Lord Torrington was fully acquitted of the various charges brought against his administration.

The gun tax was only a revival of a previously existing law, requiring the permission of the government agent of the district to carry arms, which had been allowed to fall into disuse; and the dog tax was intended to check their increase and obviate the barbarous alternative of their destruction by the police, the natives having a passion for keeping a number of useless curs, which became a public nuisance.

The conduct of the natives shows that they had been spoilt by raising them suddenly from a state of serfdom to the high standard of British freedom, the work of centuries, than which nothing can be more dangerous; although it is so much advocated at the present time by so-called philanthropists and professors.

The Buddhist priests complained that they had not been exempted in the requisition of six days' labour, or the equivalent in money from each adult male, which appears to have been an oversight in drawing up the law, and remedied on their petitioning the government to be exempted.

Great fuss was made about the shooting of a Buddhist priest in his yellow or priestly robes during the martial law, which was called "an outrage on decency, and a violation of the respect due to the religion of the country." If he was to have been shot for inciting insurrection, there was no other alternative but to shoot him in his robes, as they never wear any other dress, and to have taken them off him previous to execution would have been considered by the priests and natives a far

greater indignity. The priests themselves made no complaint on this point, and voluntarily declared they did not consider it in any degree as an indignity that one of their order was shot in his yellow robes.

It appears that the insurrection, if not originally instigated, had been much fomented by certain publications in the colony, especially by a newspaper published at Colombo, whose editor, an Englishman, took an active part in the proceedings.

An ample account of the events of 1848 will be found in Sirr's Ceylon, 1850, and a pamphlet by Colonel Forbes contains some of the charges against the governor.

Few countries have made such progress as Ceylon, during the last fifty years, in the kind of prosperity shown in Blue Books; the population has more than doubled, wages have nearly doubled, exports and imports have increased twenty-fold, and the revenue five-fold; but many articles of food are three times the price they were (chiefly owing to the extraordinary extension of coffee planting since 1840, brought about by the abolition of slavery in the West Indies—*vide* ch. xxxi.).

According to Cordiner the revenue of the island in 1802 was £226,600, and the expenditure £330,000.

Bertolacci in 1809 valued the exports at 1,690,412 rix dollars (£126,780), and the imports at 2,299,861 dollars.[1]

In 1857 the revenue was about £500,000, and for the last six or seven years has been nearly one million, and in excess of the expenditure. In 1869 it was £946,494, with an expenditure of £881,373; and in 1874 £1,300,000, with an expenditure of over a million. The Customs form the chief item. The other sources of revenue are nearly the same as in the time of the Dutch, viz., land sales, pearl fishery, land revenue, rice, and grain tax, salt, tolls on bridges, licences, distillation of arrack, sale of toddy.[2]

The public debt is £700,000, raised on debentures at six per cent. between 1863 and 1867, to aid in making the railway. Slight export duties were levied on the chief articles of export to pay the interest; but as the profit of the railway is sufficient

[1] Pp. 101, 2.
[2] Reports, 1870, xlix.

they were removed in 1870; they produced about £50,000 per annum.

With few exceptions, such as plumbago, the same kind of produce is exported now as in the early part of this century; but there has been an enormous increase in cinnamon, coffee, and the products of the cocoa-nut tree. The island is becoming rich, and beginning to absorb specie like India.

In 1866 the specie imported was	£1,443,177
,, ,, exported ,,	516,206
Specie retained	£926,971
Goods imported	3,140,767
,, exported	2,693,830
In 1869, goods and specie imported	3,993,834
,, ,, exported	2,989,876
In 1873 the imports were	5,574,538
,, exports ,,	5,439,591

In 1863 the following Ceylon produce was imported to England :—[1]

Cinnamon	596,769 lbs.
Coffee	69,011,290 ,,
Coir, etc.	33,635 cwt.
Cotton	32,499 ,,
Cowries (from Maldives)	4,210 ,,
Ebony	538 tons
Hemp	422 cwt.
Plumbago	3,547 tons
Chemical oils and perfumes.	22,321 lbs.
Coco-nut oil	185,257 cwt.

The following were exported to India :—

Arrack	100,250 gals.
Tobacco	22,113 cwt.
Areca nut	68,406 ,,

The imports were :—

Coal and coke	£127,729
Cotton (manufactured)	851,102
Hardware and cutlery	66,547
Curry stuff	59,617
Fish	60,905
Paddy	119,742
Rice	1,324,746
Haberdashery	66,263
Malt liquors	21,206

[1] Rep., 1865, lii. 372.

Oilmen's stores	£10,311
Spirits	24,713
Sugar	11,514
Wine	22,752

In 1865, 3,289 vessels, with a tonnage of 577,022, entered the ports of the island, and 3,304, with 599,022 tons, cleared outwards.

Education.—In 1866 there were 115 public schools attended by 5,984 pupils, besides 357 missionary schools, with 14,074 pupils; and in 1868 £18,581 was expended by government for education. However, the result of all this teaching does not appear to be very satisfactory.[1] Mr. Sendall, the government inspector, says, "With the old language half forgotten, the new language not nearly half acquired, the time for acquisition past, unable to apply his native tongue to the development of what precise knowledge he has learnt through the medium of those rags of English to which he yet tenaciously clings; what is left the unhappy victim, here of half measures, there of misdirected zeal, but to lapse into the conceited, hypocritical, petitioning, honest-work-despising animal, with whom it is not too much to say our English schools has been flooded of late years?" It was proposed to remedy this state of things by a new system, but the result will probably be the same.

Military Establishment.—In 1836 the garrison consisted of four European regiments (the 58th, 61st, 78th and 90th), the Ceylon Rifles, composed of Malays and Kaffirs, and some Royal Artillery. In 1840 it was reduced by two European regiments. Since then the home government, following the example of the Dutch, has thrown the chief burthen of defence on the colony. The Ceylon Rifles were disbanded in 1874, and there is now only one regiment (a European) and a few artillery in the island, with 1,361 police, chiefly Malays. The estimate for 1875 being £100,308 from the Imperial treasury, and £121,000 from the colony.

In 1866 it was £215,000, out of which the colony contributed £136,000.

[1] Rep., 1867, xlviii. 13.

List of English Governors of Ceylon from 1796 to present year :—

Governor-General of Madras	1796
Hon. Frederick North	1798
Lieut.-Gen. Sir J. Maitland	1805
Major-General Wilson	1811
Sir Robert Brownrigg	1812
Lieut.-Gen. Sir Edward Barnes	1820
,, ,, Sir Edward Paget	1823
,, ,, Sir Edward Barnes (again)	1824
Sir Robert Horton	1831
Right Hon. Stewart MacKenzie	1837
Lieut.-Gen. Sir Colin Campbell	1841
Lord Torrington	1847
Sir George Anderson, K.C.B.	1850
Sir H. G. Ward, K.C.M.G.	1855
Sir C. T. MacCarthy, Knt.	1860
Sir H. G. Robinson, Knt.	1865
Right Hon. W. Gregory	1871

CHAPTER XVIII.

COLOMBO AND THE SUBURBS.

The first view of the western coast of Ceylon to a voyager from Europe is generally obtained at day-break. During the north-east monsoon, Adam's Peak, towering majestically above a range of lofty mountains, is usually visible. Fleecy clouds, floating languidly around the summit, often screen the holy mount from the profane gaze of mankind, while sometimes the atmosphere is so clear it can be discerned sixty miles off.[1] Edrisi says Adam's Peak could be seen at sea several days' journey distant, and Ibn Batuta makes the same remark, adding that it looked like a pillar of smoke. The peak is more frequently seen when abreast of Galle.

The land near Colombo is excessively flat, and the shore covered as far as the eye can reach to the right and left with cocoa-nut trees, growing so near the sea that the surf, as it breaks on the sand with a booming noise, seems to wash their roots. Colombo being an open roadstead, as far as large ships are concerned, vessels anchor a considerable distance from the shore, and are immediately surrounded by canoes and boats, whose crews clambering up the ship's sides, her decks are soon covered by a crowd of natives and coolies, rather scantily supplied with clothing, but their dark and well-proportioned limbs render their nudity less remarkable.

The harbour is usually full of odd-looking native vessels, of ark-like form, with thatched roofs, Coromandel dhoneys, Bombay petamars, and cargo boats, laden with the produce of the island, proceeding to the vessels in the offing, their swarthy rowers stimulating each other in their exertions by a mono-

[1] Horsburgh, Direct. p. 540. The peak is 7500 feet above the sea.

tonous kind of chant, and the traveller lands amidst all the stir and confusion of an active commerce; crowds of coolies and bullock carts, and piles of merchandise, rice, coffee, oil, and cinnamon.

The first impression of Colombo on landing is exceedingly pleasing, especially to one coming from a long voyage, the rows of tulip-trees round the jetty, the harbour, and on each side of the principal streets affording an agreeable shade from the powerful rays of the sun, and giving a very garden-like appearance to the place, their green leaves contrasting vividly with the peculiar red hue of the roads, one of the first things that attracts the eye of a stranger.

Colombo is situated in 6° 55′ north latitude, and 79° 45′ east longitude. The rocks on which the fort is partly built form a kind of headland, sheltering a small harbour of semicircular form curving behind, only accessible to small vessels in consequence of the shallow water on the bar of sand. The headland was most probably the "Jovis extremum" or Cape Jupiter of Ptolemy, although he greatly exaggerated the size.

As shown in chapter ix. there is good reason to suppose that Colombo, from a very remote period, has been the chief seaport of Ceylon, as it certainly was when the Portuguese arrived in India, and the Arabians appear to have early taken possession of the harbour, and established a colony in the vicinity. There was formerly in the Mahometan cemetery a tomb-stone, bearing an inscription in Cufic characters, which was removed by order of the Dutch officials in 1787, and used to form a doorstep for a house one of them was building in the Pettah. The inscription attracted the attention of Sir Alexander Johnson, who had it copied and sent to England for translation, and is supposed "to commemorate an Arab named Kalid-ibn-Abu Bakaya, who distinguished himself by obtaining security for religion, and other advantages, for the Moors, in the year of the Hegira, 317." Dr. Lee, of Cambridge, in his account of the inscription, thought it referred to the custom in the island of carrying off wealthy Arabs, until they were ransomed, mentioned by Abu Zaid as existing in his time.[1]

[1] Trans. R. A. Soc. 1827, i., iii., pp. 538, 545; also ch. xi., and Gildemeister,

The tradition current among the Moors in Ceylon concerning this stone is, that the Khalif of Bagdad, in the beginning of the tenth century, hearing that the Moorish traders settled in Colombo were not very orthodox Mahometans, sent a learned priest to instruct them, who built a mosque, and when he died, to commemorate his virtues a tomb was erected in the cemetery, which remained for 800 years, when the Dutch removed it as related. Quite recently there was a low building, with a verandah, on the Galle Baak,[1] to which the Moors made pilgrimages as a place of sanctity, probably in memory of this Bakaya. The original building or tomb is said to have been destroyed by the Portuguese, when erecting their fortifications.

The ancient name and site of Colombo was Kalany-totta, a village and ferry over the Kalany ganga river, about four miles from the port, forming part of what is now called the Pettah. It is mentioned by the name of Col-amba in native annals, A.D. 496, when Moogallaana, who subsequently ruled at Anuradhapura, landed with an army from India, and erected a fort. Ibn Batuta, in 1344, called it "Kalambu, the finest town in Serendib." This name it retained until the arrival of the Portuguese, who are said to have changed it to Colombo, in honour of Columbus the great navigator, but the name of Colombo had been applied to the whole island in old maps long before the Portuguese arrived in India.[2] Valentyn[3] imagined the term colamba had some reference to a mango leaf.

The fort is built on gneiss rock, the upper part of which has turned into laterite, and is not much more than eighteen feet above the level of the sea. Ribeyro says Colombo, after the arrival of the Portuguese, was "at first only a factory, surrounded with a palisade; then a small fort was built, and at length it became a very pretty and agreeable town, with bastions, and an esplanade, but the walls for a long time were only '*taipa*

Script. Arab. p. 54, who has "Edita est inscriptio sepulcralis in urbe Kolombo reperta, Karmathicies, quæ dicunter literis exarata viro cuidam Arabi mortuo, anno 337, 10 Jul. 948 posita."

[1] Named so from Galla the Sinhalese for a rock, and Baaken the Dutch for a beacon or lighthouse.

[2] Rajavali, Knox, part i. 3. *Vide* ch. ii.

[3] Genaamd colamba of 't mangaas-blad afneemen, v. 275.

singella' (mud), with a ditch which communicated with the lake, and were mounted with 237 guns—16 and 36 pounders. There was a battery on the headland, but the southern part of the town was open, being only enclosed for 400 paces by the lake. There were five religious orders—Dominicans, Cordeliers, Augustins, Capuchins, and Jesuits, with colleges and hospitals." There are no traces of these monasteries to be found now, having been probably destroyed by the Dutch when they threw down the old walls and built the present fort, which occupies less space than the Portuguese, being about two miles in circumference, constructed on a plan, it is said, of Cohorn, having four bastions on the land side, counterscarps, ravelins, and deep wet ditches, supplied by sluices from the lakes, which in one place reach the walls. There are seven batteries towards the sea, adapted to the rocky line of coast, and four gates, two having drawbridges on the land side. The delft, or main gate, leads to the Pettah, and a sally port to Slave Island. The walls on the Galle Face side are very high, with counter guards, and two tiers of guns, on account of the land rising slightly in that direction.

The fort of Colombo is a place of great natural strength, occupying as it does a rocky promontory between the sea and two large lakes. There are few places on the sea side where a landing could take place, in consequence of the surf, except occasionally during the north-east monsoon, when the swell diminishes considerably.

Captain Percival remarked, when the English captured Ceylon, that Colombo was built more in a European style than any garrison place in India, not being disfigured with native huts. One of the first improvements of the English was to remove the glazed windows and replace them with Venetian blinds, which freely admit the air. Many of the houses have only a ground floor, some with gardens in front, and the streets are kept in very good order by native convicts, who are usefully employed in sweeping them daily. There are numerous stores, warehouses, and banks, and all the appearance of a rich and prosperous place, a great deal of activity being displayed in the day time, but in the evening the streets are

quite deserted, arising from the number of merchants, officers of the garrison, and official persons, who live in the suburbs. The residence of the Governor, or "Government House," as it is called, along with the Church, and the Government offices, are in the fort. Previous to the extension of coffee planting more persons lived in the fort than at present. Many of the houses have been turned into coffee stores, where large numbers of native women are employed[1] picking and drying the berries, which are spread out on mats under the verandahs, amidst a perfect din of voices, the Sinhalese women being apparently endowed with a more than ordinary share of the volubility of their sex.

Many changes have been made recently. The streets are now lighted with gas, in place of the old oil lamps; the light-house has been removed from the flag-staff battery to the centre of the port, and a new Government house has been built. But there is a want of drainage, and the fort is badly supplied with water, that found in the wells being brackish and unwholesome. All the drinking water is brought by native carriers in earthen vessels, from springs in the cinnamon gardens, and other places outside. (*Vide* chapter vi.)

The fine *Hibiscus* (Linn.), which so agreeably shade the streets and ramparts, were planted by the Dutch, and are named from the pale yellow tulip-shaped flowers with which they are always covered.

The atmosphere of the fort is generally heavy and oppressive, caused by the surrounding ramparts preventing a free circulation of air. This sensation is particularly remarkable on entering it, when returning from the usual evening drive on the "Galle Face," where, every evening, between five and seven, when the power of the sun somewhat declines, are assembled all the "rank and fashion" of the place, who are desirous of obtaining a little fresh air and exercise, most of the gentlemen being on horseback or driving, and the ladies in palanquin carriages.

Ceylon being only six degrees from the equator, the sun sets all the year round about six o'clock, and there being little twi-

[1] *Vide* ch. xxxiv.

light, it is quite dark when people return home to dress for dinner at seven.

In consequence of the long duration of the south-west monsoon, and its blowing over the Indian Ocean, the air of Colombo and southern coast is damp, and impregnated with salt. Iron articles rust with great rapidity, and books and papers moulder, unless taken care of. A similar humidity prevails in the air at Buenos Ayres, where salt is always in a liquid state.

The principal suburb of Colombo is the Pettah, or "black town," being almost entirely inhabited by natives and half-castes. The houses formerly came close up to the fortifications, but in 1795, when the Dutch were preparing for the descent of the English on the island, many were removed, and a clear space made between them of several hundred yards. The Pettah is very large, and generally well built, containing many fine houses and luxuriant gardens, the residences of the rich descendants of the Portuguese and Dutch. Some of the streets are shaded with tulip-trees, and the houses coloured bright yellow, with bands of red or deep orange round the doors and windows, and many have white earthenware vessels fixed on the roofs or gables, to draw off the "evil eye."

There are very good shops in the Pettah, kept by Moormen and Parsees. The Moors have such long and unpronounceable names, that their establishments are known to the Europeans who patronise them by the number of the house; No. 42 was well known. These long names are in reality a species of pedigree, and almost identical with the Biblical manner of writing names. For instance, in Ezra vii. 1, we have Ezra, the son of Azariah, the son of Hilkiah; if we omit the words "the son of," it would read like the Moors. Some Spanish hidalgoes write their names in a similar manner. Moormen's shops are like American stores, all sorts of articles being sold in each of them; wines, saddles and bridles, gunpowder, pickles, soap and perfumes, cheese, ribbons and ladies' finery. Every conceivable variety of goods are also hawked about the fort and suburbs. These itinerant traders attend auctions and bankrupt sales, and sometimes sell things cheaper than in England, where they are made, but invariably ask more than they will

take. The same habits prevail in shops and bazaars, being in fact a universal custom in Eastern countries. The hawkers are mostly Moormen, and some Malabar Christians, who are distinguished by a small silver cross hanging from their necks. They are usually accompanied by coolies, who carry the goods on their heads. Among the Moorish traders are those who carry about jewellery for sale; they are very persevering and acute, and a purchaser requires some experience when buying their often bad jewellery and worthless stones, offered as "first-rate gems." Some of the articles they sell are made at Galle, but principally at Jaffna.

Seated on mats under the verandahs of the Pettah are to be seen the money-changers, surrounded by heaps of silver and copper coin. The habits of the East in some things seem immutable, many traders refusing to give change, it is necessary for a purchaser to provide himself with small coin.

The environs of Colombo present all the varied attractions of tropical scenery. On the land side two fine lakes, separated by a promontory, called Slave Island, bathe part of the ramparts of the fort; between the western side of the lakes and the sea is a large strip of land more than a mile long, covered with a kind of short grass, and completely devoid of trees; this is called the Galle Face, and is the Hyde Park of Colombo. Its appearance alters very much with the season of the year, some time before the monsoons change. The long absence of rain and the scorching sun completely obliterates all appearance of verdure, the baked and parched earth looking as bare as the desert; but in a week or two after the monsoons its surface is entwined by the tendrils and covered with the purple blossoms of the goat's foot convolvulus, mixed with the bright green of the young grass, presenting a change quite magical. Sir E. Tennent says, "It realises the beauty of the scene which Darwin describes on the La Plata, where the tracts around Maldondo are so thickly overrun by *Verbena Melindres* as to appear a gaudy scarlet."[1] Sir E. Head in his ride across the Pampas of South America mentions the extra-

[1] Vol. ii. 146; Naturalist's Voy., ch. ii.

ordinary rapidity with which they are covered with a new crop of thistles after rain.

The Galle face is much infested by a small land crab (*Ocypode*), rendering it dangerous for horses, who often fall with their riders, from the holes made by their burrowing under its surface. There is a circular race-stand in the centre, and races take place every September.

It is traversed by several roads, one of which leads to a beautiful suburb called Colpetty. The road, after leaving the Galle Face, is lined on each side by a thick grove of cocoa-nut trees, their tops in some places nearly joining overhead; a mass of flowering shrubs and fruit trees of every description growing underneath in all the luxuriance of perpetual spring, forming a rare and matchless avenue in its peculiar style of beauty. Along it, at intervals on each side for some miles, partly-cleared spaces present themselves, containing houses having large verandahs, the habitations of civil servants and officers who retire to their luxurious retreats in the evenings from their offices in the fort. Some parts of the Colpetty road are thickly studded with native huts and bazaars built under the cocoa-nut trees. In the evenings cooking is going on at all sides, and the place crowded with natives making purchases in the bazaars, which are lighted with little brass lamps suspended from strings, presenting the appearance of a night fair held in a wood. Here are spread out heaps of fruit and fish in endless variety, rice and other Eastern grains ready cooked, with curries and savoury fries not very palatable to a European. The pleasures of the cup have its votaries also; groups of men are seen in the toddy shop spending their last fanam on the tempting liquid amidst sounds of revelry. The deep red colour of the roads, the glare of the lamps, the heat, and the crowd all combine to form as warm a scene, both in colour and temperature, as can well be imagined. The Colpetty road is the high road to Galle, the avenue of cocoa-nut trees continuing the whole way, a distance of seventy miles. In no other part of the world do these trees grow to greater perfection than on this coast, frequently attaining a height of ninety feet. The saline breeze seems to be in some way essential to

their existence, growing so near the surf, and their heads inclined so far over the sea a nut might drop into it.

In 1813 it was calculated there were 10,000,000 of these trees on the coast between Dondra Head and Calpentyn, and they have more than doubled since then. The further they are removed from the sea the more their growth and produce are diminished, being rare in the interior of the island, and in all probability an exotic, for nowhere in Ceylon are they to be found except in the vicinity of habitations.

Among their numerous uses is that of lightning-conductors, being frequently struck by the electric fluid, shielding the houses built under them. Five hundred trees are stated to have been struck in a single plantation near Puttam during a succession of thunder storms in April, 1859.[1] Mr. Thomson, a writer in the "Journal of the Archipelago" for 1850, vi. 103, remarks that "the tendency of the cocoa-nut tree to bend over the sea, so that the nuts drop into the water, accounts for its growing in so many islands and atolls, to which they are floated by the winds and waves, its habitat being the sea shore fringing the beach. When planted in other localities it neither grows so well nor yields fruit, unless it be on rich soil, or in the proximity of dwellings," which accords with a saying of the Sinhalese that it grows best within the sound of the human voice. The cocoa-nut appears to occupy the same place in the vegetable world that the camel does in the animal kingdom, not being found anywhere in a wild state or unassociated with man. Dampier gives a curious illustration of the love of the cocoa-nut tree for the sea. The little sandy island of Pulo-Megas, fifteen leagues off the coast of Sumatra, not a mile round, is full of them, producing fine nuts, notwithstanding that every spring tide goes clear over the island." He also remarks that "he saw abundance of nuts in the sea seven or eight leagues from Sumatra, and that they lowered their boats and took some of them, which they found sound and good."[2] It is supposed that the tree is not indigenous in Ceylon,

[1] "Colombo Observer," quoted by Sir E. Tennent, ii. 124.

[2] Voy., i 474. A drawing of the figure at Belligam, with an account of the legend by Capt. McKensey, is given in the Asiat. Res., vi. 426.

having been originally floated by the sea from some other place and self-sown on the beach. The nut is first mentioned in the Mahawanso, B.C. 161, and there is a figure cut in a rock at Belligam said to be that of Kustia Raja, an unknown Indian prince who taught the Sinhalese the use of the cocoa-nut, a record which seems to point to a foreign origin. Ælian, A.D. 260, mentions as a peculiarity of the coast of Ceylon that palm trees were planted in regular order like a garden; but it is a question whether he was not alluding to the palmyras of the northern portion of the island, if not, the western coast must have presented the same aspect sixteen hundred years since as at present. The first person who names them as a product of the island is Palladius, A.D. 403.

Sir E. Tennent (v. i., 436) suggests, "that if originally self-sown, flung ashore by the waves, it must have come during the south-west monsoon from Cape Comorin, because they are most abundant on the south-west coast, none being found on the north-east side of the island, though washed by a powerful current." But the south-west monsoon could hardly have brought it from Comorin, as the current runs in a contrary direction, although it might from the Maldives or Seychelles, a much more probable source, islands where the tree abounds, while they are comparatively scarce at Cape Comorin. The wonderful double cocoa-nut (*Lodoicca sechellarum*), a native of the Seychelles, is frequently carried by the waves and currents and thrown on the Maldives, a distance of 600 leagues. (*Vide* ch. xxxiii.)

North of Colombo, near the mouth of the Kalany River, the country is intersected by numerous water-courses, and the roads carried over marshy plains on an embankment, passing numerous hamlets surrounded by cocoa-nut trees and rice fields. Some years since the sides of the Kalany, or Mutwal, as it is often called, were covered with hundreds of flat-bottomed boats with cajan roofs, in which natives lived after the manner of the Chinese. Mount Lavenia, a headland seven miles from Colombo, contains the ruins of a country mansion built by General Barnes when governor, which is said to have cost £30,000. The road hence to Pantura is carried along the

coast over a broad sand-bank, which borders the lagoons, studded with numerous fishing hamlets, and at Morotto there is a large village of carpenters who make much of the jakwood furniture sold in Colombo.

The ramparts of the fort and houses about Colombo are built of cabook, and are nearly all on the ground-floor, having large and lofty rooms, and surrounded by verandahs principally supported by timber posts inserted into stone bases to keep off the white ants, and covered with half-round red tiles. Some houses have two or three verandahs projecting one beyond the other, which keeps the centre of the house cool. Very few have glass in the window frames, Venetian blinds made of wood taking its place, which admit the air. The floors are paved with square bricks, and covered with mats in lieu of carpets; some of the mats are nearly white, and contrast very well with the handsome and finely-carved ebony furniture with which the rich civil servants furnish their houses. As the doors and windows, in consequence of the heat, are wide open all day, to prevent passers-by looking into the rooms, the verandahs are hung with open-work mats made of split bamboos, called tatting, joined with coir twine and painted green.

The pleasure grounds or gardens which surround the houses in the environs of Colombo are generally called "compounds," derived from the Portuguese campinho, meaning a little field or enclosure, and abound with varied and beautiful flowering shrubs, both indigenous and exotic, from the Archipelago, China, Australia, and South America, mixed with broad-leaved plantains, papaws, oranges, pine apples, jambos, &c., all growing together with the utmost luxuriance beneath the shade of tall cocoa-nut trees, tamarinds, jak, and bamboos, little art or care being shown in their arrangement, having all the appearance of the spontaneous growth of nature.

CHAPTER XIX.

THE POPULATION.

The population of Colombo, and many of the towns on the sea-coast, is of a very mixed character. Among the motley crowd who throng the streets of the Pettah are to be seen representatives of many of the nations of Asia, Parsees, Chinese, Malabars, Malays, Arab and Persian horse-dealers, Kaffirs, and Affghans. Malabars or Tamils are very numerous, and do most of the hard work of the island in the capacity of coolies. The Sinhalese make good domestic servants and artizans, but object to all kinds of laborious employment. The Governor, in his report for 1866,[1] says that "recently the high wages obtained in the island, 1*s.* for unskilled and 1*s.* 3*d.* to 2*s.* per diem for skilled labour, is tempting the Sinhalese to overcome their indolent habits, seeking employment in a way that astonishes those acquainted with their lazy natures." The Parsees and Moors are exclusively engaged in commerce, and the poorer among the numerous half-caste descendants of the Dutch and Portuguese are employed as clerks in government and other offices, while the rich are merchants or follow various professions, such as doctors and lawyers, forming a species of middle class in the island. Sir E. Tennent remarks, "It is not possible to speak too highly of the services of the half-caste clerks and writers who fill places of trust in every administrative establishment, from the department of the Colonial Secretary to the humblest police court."[2]

The variety of feature and complexion among the inhabitants is very remarkable, varying from the sickly yellow of the European, which one immediately remarks on arrival

[1] Vol. lxviii. [2] Vol. ii. 156. (*Vide* ch. vi.)

among the officials who visit shipping, to the shining black of the Malabar coolie; the Sinhalese of pure and unmixed blood presenting the most agreeable appearance of all, being of a clear brown. It is curious to remark the different effect produced by the intermarriage of the Dutch and Portuguese with the Sinhalese. Men with Portuguese names and speaking that language are seen as black as a Malabar, but having European features, while those with Dutch names generally resemble the English residents in complexion. Many of the half-caste Portuguese women when young are exceedingly good-looking, but their beauty fades rapidly, and before thirty they are either a shapeless mass of fat or only skin and bone,[1] wrinkled and toothless; and the same may be said in lesser degree of the native women, few of them after that age retaining any good looks.

As might be expected, from such a number of nationalities, with their varied religions, there are a great variety of forms used in administering oaths in the courts of justice, but none of them appear to have much effect in producing truth, perjury is so common; judges estimate evidence by probability. The Buddhists and demon worshippers are sworn upon two large copper rings with small iron balls, supposed to be the bangles of the goddess Issa Pattine; they are wrapped up in red cloth and called the Hallan. Mahometans are sworn on the Koran; Hindu worshippers of Siva and Vishnu drink a little water of the Ganges in a copper pot, or eat toolsee (the woolly basil, *Ocymum villosum*). The "Asiatic Journal," 1827, contains an account of the oaths most binding on the Hindus, the question having been referred to the Pundits at Benares, who decided as above. Malays are sworn on a saucer or small plate, which is let fall on the ground and broken in pieces, indicative of the fate of those who perjure themselves. "Swearing by stepping over a father's body prostrate in a temple was abolished, as far as courts of justice were concerned, in 1819."[2] The practice of swearing by ordeal, which existed among the Kandyans, is mentioned by Dr. Davy and Knox, who say, "they swear by dipping their fingers into

[1] Sirr. [2] Robert's Orient. Illust., p. 88; Gen. xxxi. 53.

boiling oil and it does not hurt them." The Buddhist priests had some means of protecting the fingers of those they wished to escape. Baldæus mentions a very formidable species of ordeal in Malabar, which one can hardly believe was ever put in practice. Persons sworn were obliged to swim across a river between Cochin and Cranganor which was full of crocodiles, if he escaped unhurt he swore truly. In Canaro a lemon was required to be taken out of a bowl from among a lot of adders." [1]

The Sinhalese are of slender frame, but generally well made, having small hands and feet and square shoulders. Like many Asiatics their heads are rather long and have the Hindu type of face, with light brown skins and black eyes; hazel eyes are uncommon, and grey very rare. The Kandyans are much stouter than the lowland Sinhalese, and wear beards. The most remarkable feature among the lowland Sinhalese men is their long hair, rolled up into a lump at the back of the head, and kept in its place by a tortoise-shell comb; this, together with their having little beard and the petticoat "comboy," a long cotton cloth wrapped round their loins and legs, gives them the appearance of women. This singular manner of wearing the hair is not adopted by the Kandyans, being chiefly confined to the western and southern maritime provinces. (*Vide* ch. ix.)[2]

[1] Chur. Coll. Voy., iii. 793.

[2] Sir E. Tennent, describing the aspect of the Sinhalese, ii. 107, quotes the Chinese Hwen Thsang as remarking they had "un corps d'homme et un bec d'oiseau," but Hwen Thsang did not apply this to the Sinhalese, as his text will show. Writing from Southern India (A.D. 648), at the end of his account of Ceylon, he says, "Après avoir fait par mer plusieurs milliers de li au sud de ce royaume, on arrive à l'île de Na-lo-ki-la (Narakira dwipa). Les hommes de cet île sont petits de taille, n'ont pas plus de trois pieds, ils ont un corps d'homme, et un bec d'oiseau," Julien's trans., ii. 144, evidently referring to the Andaman or Nicobar islanders, whose savage nature and appearance obtained for them the reputation among travellers of having visages that were not human. Abu Zaid says, "leurs visages et leurs yeux ont quelque chose d'effrayant," Voy. Arabes. Marco Polo says they had the faces of dogs; but the habit of comparing aborigines to animals is as old as Ctesius, B.C.? 400, who speaks of people in India with dog's heads. Col. Yule, in a note to his Polo, says, "the Andamans are perhaps the Nalokilo narikela dwipa or cocoa-nut isles of which Hwen Thsang wrote as existing some thousands of li to the south of Ceylon." Hwen Thsang, describing the Sinhalese, i. 125, makes no allusion to their faces, although he speaks of their small stature.

The height of the comb stuck in the hair indicates the caste or social position of the wearer. Of two extremes, leaving the hair on the head its full length is certainly more rational than cutting it all off, as the Moors, Malabars, and Buddhist priests do, there being no better protection against the sun's rays. Albyrouni, quoted by M. Reinaud in his "Mémoire sur l'Inde," remarks that the Indians did not shave their heads before the time of Mahomet. However this may be, the practice of shaving the head is very ancient. Herodotus says it was practised by the Egyptians, and that it hardened their skulls; he also mentions it among the Arabians, and the Macians, a people of Libya, who cut their hair so as to leave a tuft on the top of the head, as with many Hindus at the present day. The Sinhalese frequently wrap a small handkerchief round their heads.

Gathering up a comboy between the legs, which is sometimes done to give more freedom to the limbs, is considered the sign of a low-caste common person. The Mahawanso (p. 245) mentions that King Bujas-daso disguised himself in this manner. The low-castes among the men, both Sinhalese and Malabars, wear the smallest possible quantity of clothing, a square yard of calico being all they require.

The long narrow coat of blue cloth with a number of silver buttons down the front, worn by the lowland chiefs or headmen, is said to have been introduced by the Dutch.[1] Their jewelled sword-belts are a remnant of the old native dress.

Malabar women, both old and young, are clothed in a single piece of white or coloured calico, several yards in length, which they wind about themselves in a very artistic fashion, the end of the material being thrown over the left shoulder or head. Kandyan women adopt the same fashion, but the lowland Sinhalese women do not put the calico higher round their persons than the waist, wearing a short jacket of thin material ornamented with a profusion of silver, gold, or jewel buttons, according to the wealth of the wearer. The old

Human figures with heads and faces resembling birds are found among Egyptian sculptures.

[1] Lord Valentia's Travels

women of the lower castes generally dispense with the jacket, being naked to the waist; low-caste women were formerly forbidden by the kings of Kandy to wear a jacket, so the unpleasant fashion has continued.

All the native women indulge more in an excessive quantity of jewellery than fine clothes, the rich among them being covered with chains and rings, necklaces and bangles, both on their arms and ankles, rings on their toes as well as their fingers. The poor decorate themselves with cheap substitutes formed of chank shell, sharks' teeth, and scented woods; necklaces are made of glass beads, the scarlet seeds of the *Abrus* and *Adenanthera Pavonina*, the hard black ones of the *Cannia indica*, and the dark oval berries of *C. Urens*. Their hair is twisted into a lump at the back of the head and secured by large dagger-shaped pins of gold and silver. Both sexes take great care of their hair, frequently anointing it with a compost made of boiled Caffrarian limes (*C. Tuberoides*) and yolk of eggs, afterwards washed out with cold water.

There is a general idea in most parts of the East that this display of jewellery on women and children draws off the "evil eye," of which they are in much dread. Of all the strange superstitions in the world that of the evil eye is the oldest and most universal, being mentioned both in the Old and New Testaments (Proverbs, ch. xxiii. 6, xxviii. 22; Mark, ch. vii. 22). The sin of covetousness and the evil eye would appear from the passage in Proverbs to be the same thing, and forbidden in the tenth commandment. The evil eye is as much dreaded by the modern Greeks and Romans as by their ancestors of old. In Russia, when a woman praises or embraces a friend's child she afterwards spits three times in its face to remove the evil eye. It is not many years since an English gentleman was assaulted in Toulon by a man and wife of the lower orders because he looked with admiration at their pretty child. Mahometans suspend objects from their ceilings to draw the spell off, and the Irish and Scotch, in common with the Tamils, are persuaded that their cattle are injured by its blight.

The faces of young Sinhalese women are generally pleasing

although they are rarely handsome, but their figures are very good and well-proportioned, especially their feet, hands, and arms, which are beautifully formed.

Harita, an Arab writer, says Ceylon was renowned for the beauty of the women, but most persons who have seen them will think there is not much of it to be found among them at present. The women about Negumbo are reputed to be the best-looking in the island. One woman of Ceylon, Padmani, queen of Tchitor or Chitor, was celebrated throughout India for her beauty and heroic devotion; the bards of Radjasthan and the Islamite poets have made it the subject of romance. Daughter of a king of Ceylon, and spouse of the Rana of Chitor, she excited the cupidity of the Sultan Ala-oud-din, and, according to the Hindu bards, the charms of Padmani were more the cause of his attack on the citadel of Chitor than the love of renown or thirst of conquest. The first attack was repulsed by Gosa, uncle of Padmani, assisted by his nephew Badal. The second was in the year 1290 according to the Radjpootes, in 1303 according to Ferischta. When all hope of succour was lost to the besieged, Padmani, with several thousand women, shut themselves up in a subterranean vault and were consumed by fire, voluntarily sacrificing themselves to escape dishonour and violence from the enemy. A note in the "Journal Asiatique," for 1856, says Padmani "has been erroneously called a daughter of a king of Siam in a French geography of India." Yet there is some doubt about her being a daughter of Ceylon; there is no notice of the event to be found in the native annals. Among the MSS. of Sir Henry Elliot there is an Arabian romance on the subject by Malik Mohamed.[1]

Marriages.—Sinhalese women marry very early, about fourteen, and their husbands are also very youthful. Marriages are commonly arranged by the parents; the ceremony consists in tying the thumbs or little fingers of the man and woman together with a thread, after which the man pours some sandal or other scented oil on the bride's head. Divorces are com-

[1] *Vide* "Annals of Rajasthan," by Col. Tod, i. 262; "Garcin de Tassy," His. de la Litt. Hindouie, i. 250.

mon and accomplished with the greatest facility, although the Sinhalese are not much given to jealousy.

Some years since a new law of marriage was passed by the government, which was universally opposed by the natives. In 1864 only seventy-four marriages were registered, while six hundred and forty-three were performed according to the ancient custom. The Governor says in his Report for 1866, "if this continues nine-tenths of the population will be bastards in a short time." They have many children, who are entirely devoid of clothing until about their seventh year; all the native children from their earliest age have strings or silver chains fastened round their loins, to which are suspended coins, bits of ivory, shark's teeth, and graven charms warranted to preserve the wearer from every ill, especially the evil eye. Native children are anything but interesting objects to behold as they crawl and roll in the dust in front of their huts, being usually blacker than their parents, and having an unsightly development of stomach, caused by the excessive quantity of fruit they eat. Many have all the hair shaved from their heads except a long tuft on the top, which does not add to their attractions, presenting the oddest appearance possible. The blackness of Indian children was noticed by Marco Polo. Speaking of the Coromandel, or rather Southern India, he says, "the children that are born here are black enough, but the blacker they be the more they are thought of; wherefore, from the day of their birth, their parents rub them with oil of sesame so that they become as black as devils." (ii. 291.)

Children receive their names when about a year old, a gathering of friends and relations taking place on the occasion. Their names usually have reference to some peculiarity in the child, as "punchy," small; "kalu," black; "locoo," large, with the addition of Appo, if of good caste, or a name derived from the occupation of the father or place of abode.

Polyandry.—Plurality of wives is rare among the Sinhalese, but plurality of husbands is not uncommon even now in the Kandyan provinces among both high and low castes, "the latter saying one man is too poor to keep a wife, and children

having two fathers are better looked after."[1] The woman's husbands are always brothers.

This odious custom was universal in the island previous to the domination of the Europeans; but the influence of the Portuguese and Dutch, who passed severe laws against the practice, extinguished it in the maritime provinces.

Baldæus mentions a case that happened at Jaffna within his own knowledge, which he says would have been punished with death had he not interceded "in regard of the tender beginnings of Christianity, the same being passed by for that time."[2]

Some new laws have been made within the last few years, which it is hoped will put an end to it everywhere in the island.

Raja Singha,[3] king of Kandy, was born in polyandry, and the King Cotta, when the Portuguese landed in Ceylon, had one wife in common with his brother. This practice is exceedingly ancient in Ceylon and elsewhere, having existed from time immemorial in Thibet and among the Chinese Tartars, and has been practised by every race of the Indian peninsula. According to Du Halde[4] the Thibetans excused it on the plea that they have fewer women than men among their population, which is said to be the case where it prevails. There are fewer women than men in Ceylon.

Herodotus mentions a similar custom among the Agathysses of Scythia, B.C. 484. Humboldt found it in one of the Canaries; it is said to exist at Guana in South America, and was common in Britain at the time of Cæsar's invasion.[5] It has a partial sanction in the ordinances of Menu, and regulates the laws of inheritance among the Nairs of Malabar. At the present time it is practised in Silhet and Kachar, also by the

[1] Davy.

[2] Chur. Coll. Voy., iii. 822; Valentyn, p. 95.

[3] J. A. S. Beng., ix. 834; Asiat. Res. v. 13.

[4] "Quand on reproche aux Lamas un si honteux désordre ils s'excusent sur le peu de femmes qui se trouvent dans le Thibet qu'en Tartarie," iv. 572. See also Jacquelmont, Trav. in Thibet.

[5] De Bello Gallico, v., xiv.; Humboldt, Narrat. ch. i.; Wood, "Wild Races of Men," ii. 610; Klaproth, Jour. Asiat. 1831.

Coorgs of Mysore and the Todies of the Nilgherries. Polyandry, as it exists among the Nairs of Malabar, has peculiar features, "closely resembling the system of the 'Divine Plato,' who goes even beyond them, from whom he probably derived his ideas, and would have reduced men to the condition of brutes; it is singular they should have found acceptance because he wrote them in the Hellenic language."[1] Barbosa says: "Nair women are all accustomed to do with themselves what they please with Brahmins and Nairs, but not with people of lower castes under pain of death."

As far as Ceylon is concerned, polyandry is reprobated in the "Mahawanso" and "Rajavali," but it would appear that the Buddhist priests never interfered to stop it. Sir E. Tennent says an aged chief of the Four Corles informed him "that its prevalence in the island was to be attributed to the feudal times, when from the long forced absence of people in attendance on the kings and chiefs, their rice-lands would have gone to destruction if some interested person had not looked after them; hence community of property led to community of wives; but the custom is much more ancient than the time this explanation refers to, and can be shown to have existed long before Wijayo."[2]

Betel.—All the Sinhalese men and women indulge in the disgusting habit of chewing betel, which reddens the saliva, giving their mouths the appearance of bleeding, and blackens their teeth; they all carry a small box containing the three ingredients necessary for the process, viz., a few fresh leaves of the *Piper betel*, a little very fine chunam or lime, made from pearl oyster-shells or coral, and areca-nut cut into thin slices, camphor, aromatic spices, musk, ambergris, and catechu have been added, in India and elsewhere. In Ceylon the flowers and bark of one of the anonads, *Xylopia parviflora*, are occasionally chewed with it.

It has been said betel is used to correct acidity of stomach and act as a tonic, their food being principally of an insipid or acid nature, such as rice and fruit,[3] but they do not habitually

[1] Note of the Hon. H. Stanley to his Barbosa, pp. 127, 133.
[2] Tennent, ii. 429; Mahaw., p. 227; Raja, p. 250. [3] Tennent, i. 113.

swallow it, only when influenced by hunger to allay appetite, which it does to some extent; besides the ingredients used in curries would correct insipid food without resorting to betel chewing, which can only be classed with smoking and other bad habits, and is said to cause a peculiar form of cancer in the cheek; however, it is considered so essential, and the passion so prevalent, the first thing the youth of both sexes provide themselves with is, a box to carry betel in, and those who cannot afford to buy one wrap it in a piece of plantain-leaf.

The habit of chewing betel is supposed to have been introduced into India from the eastern Archipelago, as the *Piper betel* is not indigenous in any part of the Peninsula.[1] It is mentioned in the "Mahawanso" in the fifth century B.C., when betel-leaves were sent as a present by a princess to her lover, and found its way into Arabia, even to Mecca, in the tenth century. Mas'udi (A.D. 943) says: "The inhabitants of Yemen chewed betel because it perfumed the breath and gave vigour to the body." M. Reinaud, who quotes him, remarks, "it is strange that neither Abu-Zaid or Soleyman make any mention of betel-chewing in Ceylon;" but none of the early travellers allude to it.

Edrisi mentions it under the Persian name (*tembul*) as growing in the Maldives, and Ibn-Batuta accurately describes it as growing like a vine over a trellis formed of reeds at Zafar in 1332 A.D.

According to Mas'udi, one of the virtues of betel consisted in its darkening the teeth—the Indians having a horror of white teeth. Some of the natives of Ceylon file the enamel off their teeth and engrave figures on them, a practice that appears to have been introduced from the Archipelago, where the same disfiguring habit prevails among the Malays. (J. A. S. Beng. iii., 612.)

Betel plays an important part in Eastern manners, being offered to guests as a compliment, and has been often employed as an agent in secret poisoning. Bernier, a French traveller, relates, "that Shah Jehan, the Great Mogul, in 1664,

[1] Royle, Essay on Hindu Medicine, p. 35; also called chavica betel. *Vide* ch. xxxv.

got rid of a Persian noble, one of his courtiers, named Nazer Khan, by poisoning him with a drug put into the betel, which he gave him as a compliment;" and a story is related in the 'Mahawanso,' (p. 219) of the wife of a Siṉhalese minister, A.D. 56, who, in order to warn her husband of a conspiracy, sent him his betel, purposely omitting the chunam, hoping that returning in search of the missing ingredient she might save him from his impending fate.

Padre Vincenzio relates that the Great Mogul and other Indian princes for the sake of ostentation had their large pearls burnt to form the lime they used, thus consuming a large sum in a mouthful.[1] And Faria-y-souza[2] says: "An Indian ambassador at Lisbon, not being able to get betel-leaves there, made use of ivy instead, mixing areca and cypress apples with them, which answered quite as well: he could not have swallowed the juice of the ivy leaves, as they are poisonous.

Both Padre Vincenzio and Linschotten state that the Portuguese ladies at Goa adopted betel-chewing, and became so enamoured of it "they did nothing but chew betel even in their beds; kings and lords used pills made of areca, camphor, aloes, and amber" (p. 108).

How comes it that the habit of chewing or smoking some substance is prevalent in so many parts of the world? The Chinese use opium, the Polynesians the root of a plant called ava, Turkish and Eastern ladies gum mastic, the Americans tobacco, and the miners of Peru the coca-leaf (*Erythroxylon*), which is said to possess wonderful stimulating properties, resembling opium without its injurious results. Poeppig, the traveller, relates "that an Indian walked ninety miles on a few grains of maize and some coca-leaves, which are chewed along with chalk or ashes."[3]

Coca-leaves have been analysed in Germany, and found to contain a crystalline substance called *cocani*, soluble in alcohol, the solution being a strong alkaline re-agent with a bitter taste, neutralising acids, and completely deadening the nerves of the tongue. When heated in chlorine it resolves into benzoic acid, and a new base called *ecgonin*, and has properties

[1] Trav. p. 364. [2] Asia. Portuguese, ii. 389. [3] Travels, vii. 248.

resembling quinine.[1] It would be well if some chemist would analyze betel and find out what makes it so attractive, having, according to a Sanskrit poem quoted in D'Alwis' 'Sidath Sangara,' "thirteen properties not to be met with even in heaven." Betel-leaves probably contain *piperine*, the active principle of black pepper, being a plant of the same family.

Many of the Siṉhalese allow the nail of their little finger to grow a great length as a proof they are not obliged to labour. The Chinese and Taheitians also adopt this fashion as a mark of distinction. Albyrouni mentions it as being practised in India in the thirteenth century.

Unlike the Kandyans, who are considered to be haughty and independent, treacherous, and cruel, the lowland Siṉhalese are generally quiet and inoffensive, assault and violence being rare with them, which is much more common among the Tamils of the north; but they are all disputatious and fond of law-suits.

Marco Polo remarks: "they are no soldiers, but poor cowardly creatures; when they have need of soldiers they get Saracens." According to Cordiner, the Dutch made some attempts to make soldiers of them, but were obliged to give it up and employ Malays and Kaffirs. The Portuguese were more successful; but many of their defeats were caused by their native auxiliaries deserting them at the critical moment.

The Southern Siṉhalese are much devoted to pleasure, gambling, and cock-fighting, which was noticed by Abu-Zaid in the ninth century, who relates, "that the inhabitants passed the greatest part of their time in amusement, and carried their love of cock-fighting to such a length that when they had no more money to lose they wagered the joints of their fingers;" and describes at length the preparation made beforehand for cutting them off the vanquished; he also mentions that sharp weapons were attached to the spurs of the cocks. A Siamese MS., translated by Colonel Low (J. A. S. Beng. 1848), states that two young princes of Lanka in the third century, A.D., quarrelled at a cock-pit where "white men" were present, and both died of their wounds.

[1] Voy. of the Novara, iii. 407.

The game fowl of Ceylon is a peculiar breed resembling the Malay, with a very small indented comb, no wattles, a naked throat, and very long tail sweeping the ground.[1]

The love of cock-fighting extends throughout the Eastern Archipelago to Oceana, and the Sumatrans are said to stake their wives, daughters, and mothers on the result.[2] Di Conti mentions the passion of the Javanese for the game.

The Sinhalese bewail their dead with loud lamentations and frightful howlings, women with dishevelled hair beating their breasts over the corpse with poetical exclamations. The same custom also prevails in Tahiti, and the ancient Egyptian women, according to Herodotus, beat their breasts over the dead. Among modern Egyptians people are hired to cry at funerals and recite poetical lamentations.

The dead among the lower castes are buried with little ceremony in any unfrequented place or jungle. Among the higher castes they were burnt on a pyre; but time is effecting great changes, and ordinary burial is now often substituted for the ancient ceremony: when bodies are burnt the ashes are collected, put into an earthen vessel and deposited in the ground near a temple.

The wants of the Sinhalese are few, and many of their habits very primitive. Domestic servants sleep either on the brick floors, or a door taken off the hinges, with nothing but a mat under them, covering themselves with their comboys. A few earthenware and wooden vessels and some mats form the whole menage of a family, a piece of plantain-leaf serving them for a plate. Knox tells us, that "Raja Singha ate off a plantain-leaf laid on a golden plate;" and Barboso mentions "that the King of Calicut used an Indian fig-leaf," meaning a plantain. Ibn Batuta says: "Plantain-leaves were used for plates in Ceylon."—"Ils apportaient aussi des feuilles de bananier sur lesquelles ils plaçaient le riz qui forme leur nourriture, ils repandaient sur ce riz du couchan . . . . qui sert d'assaisonnement . . . . qui est composé de poulets, de viande, de poisson, et de légumes."[3]

[1] Nat. Hist. Rev. i. 148. [2] Univers pitto., i. 297, 132.
[3] Vol. ii. 82; iv. 170.

The poorer class live chiefly on rice, fruit, and fish; their principal beverage is water, but they frequently drink coffee in the mornings at the coffee-shops of the bazaars, sipping the fragrant liquid from tiny cups, and many indulge in toddy and arrack, although Buddha prohibited intoxicating liquors or the taking of life, but there was no prohibition to eating animals killed by others. "Those who take life are in fault, but not the persons who eat the flesh."[1] A species of casuistry which has rendered the prohibition to take the life of animals for food of no avail. (*Vide* chaps. xxii, xxiii.) The principal meal of the natives is taken after sunset. In very warm climates all animated nature appears to follow some instinctive impulse to avoid eating during the heat of the day, which is devoted to repose.

Siṉhalese employed in European households are very good cooks, and remarkably clean and careful when preparing food; some of their made dishes would do honour to any French cook. The *chefs-d'œuvre* of Siṉhalese cookery are their mullagatawny and white soups made from fowls and cocoa-nut milk; their vegetable "plats" of bringall or egg plant mixed with chopped and seasoned meats after being boiled; their chicken cutlets, and their curries, which are numerous and varied, every description of meat, vegetable, and fish being dressed this way. Ceylon curries are much superior to those of India, from their mixing cocoa-nut milk with them, which is obtained by grating the kernel into a pulp, and pouring boiling water on it, the liquid resembling cow's milk. Curry and rice is a very ancient dish, being mentioned in the "Rajavali" in the second century B.C., and in the "Mahawanso" in the fifth century A.D. The origin of the English term curry is not quite clear; it has no resemblance to the name for the dish in any language in India or Malay: in Hindu it is called *sailan*. Knox says, "carri," as he wrote it, was a Portuguese term. Professor Wilson, in a letter to Sir E. Tennent (i., 437), thought the word "may be from the Malay 'kadi' pronounced 'kuri,' which means a dish of sour milk with boiled rice: the 'karnata-majkki-kari' is a dish of rice, sour milk, spices,

[1] Hardy, Bud. pp. 327, 474,

and red pepper." Among their sweet dishes are banana and rice-flour fritters, sweetened with jagery, and fried in ghe, which is much used in cooking and frying.

As in most warm climates, milk and butter are poor, and very scarce, the granular butter called "ghe" being the only sort obtainable, except salt butter imported from Europe. The milk is that of goats and buffaloes. (*Vide* ch. xxxiv.)

Poultry are good and were cheap in Ceylon, a fine fowl being had for six fanams, or ninepence; geese, turkeys, and ducks are equally moderate, but ducks are in bad repute in consequence of their dirty habits in feeding, the natives allowing them to pick up any filth about their huts, where they are reared. Ceylon geese are very small, of a dark brown colour with black bills, having a large horny protuberance on them. There are also guinea-fowl, pea-fowl, muscovy ducks, and several species of pigeons from Persia and Arabia. Some of the fowls have black bones, and are called "kalu maskulalo" by the natives; and Malabar fowls (*Gallus bankiva*), their plumage is a sooty-grey, aptly described as looking like a white fowl dragged down a chimney. The skin and inside of the mouth has also a dark appearance. Some persons think their flavour superior to those with white bones. There is one in the British Museum.

Poultry is the chief food of the Europeans, butchers' meat, except pork, being generally execrable. Pigs of the Chinese breed are very numerous in Ceylon, and thrive well, as they do in all hot climates. Beef is so tough, cooks pound steaks on flat stones before cooking. The best sheep in the island are reared about Jaffna, where there is some pasturage among the swampy islands, and Jaffna mutton, which is tolerable, is sometimes obtainable at Colombo; but the ordinary mutton or lamb is in reality goat or kid, there being great numbers of these animals about native houses and verandahs in the Pettah. Jaffna sheep are exceedingly small, having hair instead of wool, and a horny covering on their knees, caused by a peculiar habit of kneeling down when eating short herbage. The markets of Ceylon are supplied with many fine fish known in Europe —soles, mackerel, dories, and red mullet, besides those pecu-

liar to Indian seas. There are an abundance of very large prawns generally made into curry; and a small sardine, which the cooks string together by the dozen on fine wooden skewers, and then fry them. The seer, usually cut in slices and boiled, is the best fish in the island. (*Vide* ch. xxviii.)

A sort of muffin or bun made of rice, called appas by the natives, and hoppers by the Europeans, are much eaten hot at breakfast instead of bread, and are excellent when properly cooked.

Among the luxuries lately introduced into the island, is ice from America. Previously, wines and beverages were cooled by placing the bottles in tubs filled with a mixture of saltpetre and water.

With regard to the diet of Europeans in a tropical climate, there is no doubt nearly the whole of the liver complaint so fatal to them, is to be traced to malt drinks and spirits: light red wines are much better suited for the climate. Another of their unhealthy practices is the eating of pork and shell-fish. Egyptian, Jewish, and Mahometan law-givers have wisely prohibited the use of pork; and, however we may ridicule the idea of abstaining from these things in cold climates, there is no doubt they are excessively unwholesome in hot ones. (*Vide* ch. xxviii.)

There is a great deal of leprosy and elephantiasis among the natives in Ceylon. The latter is generally called the "Galle leg," this place having the reputation of producing it. Pliny (xxvi., 1) says that "lepra arabum" was common in Egypt. Galen, who calls it "elephas morbo," mentions it in Alexandria, but it was not noticed by Herodotus or Strabo. It is strange that so remarkable a malady should not have been noticed by any of the ancient or mediæval travellers in Ceylon, although several mention it in India and elsewhere. Ibn Batuta speaks of it at Zafer, and Ralph Fitch at Cochin, where it is very common. Elephantiasis is found in Candia, Malay, and other eastern countries. There is a long account of this disease by Dr. Ainslie in vol. i. of the "Transactions of the Royal Asiatic Society."

The descendants of the murderers of St. Thomas are

described by travellers in India as marked by having one leg an immense size. Marco Polo, who calls them "govis," says, "it was by the people of this generation that St. Thomas was killed; one of them, while shooting pea-fowl, letting fly an arrow, not seeing the saint who was saying his prayers in his hermitage."[1] This was near Madras, where he was buried, and the disease has been called by the Portuguese in India "Pego de Santo Toma." (*Vide* ch. vi.)

The Hon. H. Stanley, in a note to his translation of Barboso, who repeats Marco's account of the death of St. Thomas, in almost the same words, says, "the story of the peacock is of Hindu origin, which is a bird respected by them, and shows the antiquity of Christianity in India, tending to prove it was established there before the arrival of the Nestorians, since they come from a country where the peacock is associated with the devil, especially among the demon-worshipping Yezidys, who have it for an idol. Many of their superstitions are of Manichean origin. There is an Arabic description of animals written in Syria, in which the peacock is described as the first creature expelled from Paradise, on account of its pride."[2]

Albinism, which exhibits itself among all the fauna of Ceylon, is not confined to the animals, but occasionally breaks out among the natives: instances have occurred where they were spotted black and white, and with buff hair.

Although the Sinhalese evince a singular preference for elephants when marked in this manner, they consider it a great misfortune when it occurs amongst their children, and it has been supposed many are "made away with" on this account.

Colonel Low, in an article in the "Transactions of the Royal Asiatic Society," gives an account of a Malay albino, a very stout man, resembling a florid European, with red hair, but his children were quite black.

Fakers.—Some years since the Pettah was infested with mendicant devotees, who torture and deform themselves from a religious motive, called Fakers by the Europeans. One holds his arm in a particular posture until it becomes rigid; another,

[1] Yule's Polo, ii. 278. [2] Voy. p. 58.

his leg, or some of the fingers; some prefer a sitting posture, and, stationing themselves on the roadside, call on the passers-by for alms; many are almost naked, and each carries a cocoa-nut shell to collect alms, with a sack to hold rice—obtaining a handful here and there, in the bazaars, as they pass through them. Arabian and other ancient travellers relate some wonderful instances of the power the devotees possessed of enduring pain; and, incredible as their tales may appear, there is little doubt of their being true. Mas'udi speaks of seeing a man cut a piece off his liver before throwing himself on a fire. Jourdan de Séverac says some of them cut their own heads off with a large double-handled knife. Marco Polo also mentions their sacrificing themselves in this manner, which is confirmed by Ibn Batuta (p. 205). Abu-Zaid relates having seen a young man tie his hair to a bamboo, which was bent down, and then cut his head off, previously calling out to the people looking on, to watch how the face would laugh when the recoil of the bamboo hoisted it in the air. Di Conti mentions their cutting off their own heads, and says they made holes in their sides through which they passed a rope and hung themselves on the car of an idol (p. 29), probably alluding to Jagannathá. It is said self-torture and immolation is not practised by the followers of Vishnu, but there is some doubt about this. The Sinhalese Buddhists, however, never do so, as it forms no part of Buddhism; but ordinary mendicity of the idle, deformed, and blind, is very common. Mendicants of all sorts were only allowed to beg in the fort on Saturdays; and, recently, begging in the public thoroughfares has been altogether forbidden and punished.

Another species of fanaticism, very common in the Archipelago and occasionally taking place in India, is very rare in Ceylon. It is the Malayan propensity to what is called "running-a-muck," when frantic Malays run through the streets of a town, killing or wounding every person who comes in their way. During the time of the Dutch a reward of 200 dollars was offered to any person who killed one of them in this state. The cause of this propensity is not exactly known. Barboso, perhaps the first to mention it, says, Malays when sick make

a vow, if they recover, to sacrifice some person; and, armed with a knife, run about crying out "Amuco," which means "take care" or "get out of the way." A writer in the "Journal of the Archipelago," who says, one among a number of companions will suddenly without any apparent cause commence slaying all around him, attributes it to physical causes such as gastric derangement, or irritating sores on the body, &c. Captain Percival says, if once they make a vow on the head of their long knives to carry out any bloody purpose, they become quite careless of their lives; and the weapon is never sheathed till it is drenched in blood: if no person comes in their way, they will plunge it into a pig or a dog.

Castes.—Although castes were condemned by Buddha, this institution, which was probably introduced into the island by Wijayo and his Brahminical followers from Bengal, has continued to the present time, and still flourishes among the Sinhalese, and one of the principal reasons of the dislike of the Kandyan chiefs to British rule is their levelling ideas on this subject. One of the sutras or discourses of Buddha is directed against castes; and his priests are taken from among all classes, no caste, however low, being excluded from the honours of the priesthood; and it is remarkable that their influence amongst the upper classes has not been affected by it. With this exception there is little intercourse between the different castes, the members of each shrinking from all contact with those below them in a descending social scale until they arrive at the Rodilla outcasts, who are despised by all, as if they were lepers. Whatever a man's merits may be, he cannot rise above his caste: once a barber always a barber, is their idea. The liaison of a native woman with one of a higher caste than herself will be overlooked, or even applauded, but a similar offence with one beneath her is looked upon as an unpardonable crime, and as already stated, the greatest punishment that their kings could devise was to give a high-caste woman to a Rodilla, being considered, Knox says, worse than death.[1]

Some years since, any attempt on the part of a low-caste person to step or dress out of his position was immediately

[1] Relation, p. 71.

resented by those above him; and many instances are recorded of great personal violence being used against them. Lord Valentia mentions the case of a poor tailor, whose love of finery leading him to be married in a scarlet jacket, he was nearly murdered at the church door.[1]

In 1846, many of the Wellale headmen refused to sit down to a dinner at the Governor's, because other headmen, not so high in caste, were invited. When Mr. North was governor, a ludicrous scene occurred, through some chiefs refusing to enter his coach along with him, because the coachman was seated on the driving-box above them. However, in this, as in many things, ancient customs are gradually disappearing through contact with the Europeans; and the feeling of caste is not by any means so strong as it was, and appears to have been always less in Ceylon than in India.

The villales or agriculturists are the highest caste, and the washermen, who are called "Dobys," a name imported from India, one of the lowest, being an employment universally despised, even the poorest natives of other castes objecting to wash their own clothes.

Although it is the fashion to condemn the system of castes, there are many things desirable in it, making people more contented with their several positions, and preventing that insane passion which exists in England amongst the lower orders of imitating the rich in their dress.

With regard to handicrafts and mechanical arts, castes have proved desirable. The secrets of trades are handed down from father to son, and the experience of centuries concentrated on each. The Indian workman has not got his equal in many arts. In architecture, look at the exquisite buildings in India; look at their carvings; their Trichinopoly chains, which an European workman cannot make; their carpets, shawls, muslins; their steel, which was made in India, on perfectly scientific and chemical principles, two thousand years since,[1] and which England cannot surpass; in proof, Sheffield manu-

[1] Travels, i. 274.

[2] See Royle, "Arts and Manufactures of India;" Fergusson's "Indian Architecture."

facturers stamp their often inferior goods "Indian steel," to enhance their value. Quintus Curtius mentions that Porus gave Alexander a quantity of steel—an acceptable offering.

Goods are much carried suspended at the ends of a long flat piece of cocoa-nut or areca wood, called a "pingo," the centre part resting on one shoulder. This is a favourite manner of carrying liquids, such as water and oil, which are put into round earthen vessels. The yoke, for carrying burthens on the shoulders, is of very great antiquity, being depicted on the ancient monuments of Egypt, and alluded to in the Old and New Testaments. It is also extensively used in China and Oceana, where the Taheitans have one of the same shape as that of Ceylon.

Nautch Girls occasionally visit the island from India, not being a Sinhalese institution, probably through the influence of Buddhism. Nautch dancers are young girls, dressed, or rather wrapped, in a number of yards of rose-coloured muslin, edged with gold tinsel, the arms, face, and feet, being the only parts uncovered. They have gold ornaments in their noses and ears, rings and bangles in profusion, and their persons highly perfumed with sandal oil and attar of roses. Two men form the orchestra, one having a "tom-tom" fastened to his waist, which he beats with his fingers, and the other plays an Indian guitar, singing at the same time an insipid kind of chant, in which the girls join very much through their noses.

Before European audiences where ladies are present, and decorum observed, Nautch dances are very stupid and unmeaning exhibitions, but it is said when the audience is composed exclusively of natives, the dance is perfectly bacchanalian, a great part of the muslin in which the girls are swathed disappearing in the excitement.

The dancing girls of India, or Baladières, as they are called by the French, like the Gaditanian girls of the ancients, have always been noted for the voluptuous character of their dance, and are thus described by Raynal, "Les dances sont presque toutes des pantomimes d'amour; le plan, le dessin, les attitudes, les mesures, les sons, et les cadences de ces ballets, tout

respire cette passion et en exprime les voluptés et les fureurs."

The following description of the Devadasi, or dancing girls of the Duera, who attend the Hindu ceremony of Jagannathà, which takes place every August in the north of Ceylon, may be interesting:—"There were several girls, all handsome, and the *prima-donna* was a Malabar girl of great beauty and fine figure, a perfect model of the Venus de Medici. The beauty of their faces was spoilt to European eyes by being daubed with turmeric. The dress consisted of a robe of spangled muslin, which partly covered the left breast, but exposed the right. The robe was confined to the waist by a zone of solid gold, three inches wide, resplendent with jewels. They had ear-rings, and nose ornaments which hung down over the mouth. Their fingers and toes, arms and ankles, were covered with rings and bangles. The dancing and postures, lascivious in the commencement, increasing with the excitement, ended by bordering on the bacchanalian, accompanied by a horrid din called music, proceeding from drums, cymbals, pipes, and shells." (Bennett, p. 222).

The Moors.—By far the most active and enterprising part of the population of Ceylon are the Moors. In all matters of trade and barter they are ubiquitous, dealing in every article, from a needle to an elephant, and carry on dumb barter with the Veddahs. They never manufacture or produce anything, being entirely devoted to buying and selling.

It has been seen in ch. ix. that they were probably the first to establish the trade of Ceylon, and at a very early period formed trading depôts in every part of the Eastern Seas that had any produce to export. Their vessels were numerous enough at Canton in the eighth century to pillage the town, and visited every port of Eastern Africa, from the Red Sea to the Mozambique Channel. The products of the East, thus collected by them and conveyed to Suez, were disseminated through Europe by the Genoese and Venetians from Alexandria They formed a kingdom at Màbar, in Southern India, during the middle ages, and from Manaar, their chief settlement in Ceylon in the twelfth and thirteenth centuries, com-

manded the northern passage, exacting toll from all vessels passing that way.[1]

Their power was at its height when the Portuguese arrived in India, the Italian travellers of the period all bearing testimony to their commercial propensities and importance, being found in every seaport, where they monopolized all the trade.[2] Besides those settled in the towns, others appear to have made piratical descents on the coasts of the island. The "Rajavali" says in the time of Dharma Prakrama, a great number landed at Chilaw, to supply themselves with pearls and elephants. (Page 274).

The Arabians seem to have had a passion for trade and enterprise from the earliest ages. Sir E. Tennent, who quotes the lines in Virgil,

> Omnis eo terrore Ægyptus, et Indi,
> Omnes Arabes vertebant terga Sabæi.—Virgil, Ænead, viii. 705.

says "the author of 'Periplus' found Moors in Ceylon in the first century" (i. 631). According to Dr. Vincent, the author of "Periplus" never was in Ceylon, nor is there any allusion to Moors being in the island in this work, which, according to most critics, was written at the end of the second century.[3] Although there is little doubt they traded in Ceylon before our era, we have no proof of their having settled or formed colonies in the island before the time of Mahomet, and their own traditions point to that period.

The annals of "Rajasthan," translated by Colonel Tod, state that a tribe of Arabs were expelled from Khorassan to India (A.D. 642), by Khalif Hagi, which nearly agrees with Casie Chitty's version, in his letter to Sir E. Tennent,[4] that the Moors believe themselves to be of the posterity of Hashem, according to one tradition driven from Arabia by Mahomet himself, as a punishment for cowardice at the battle of Ohod, and according to another version by Khalif Abu-al-Melek-ben-Mervan, in the early part of the eighth century, their first

[1] T. R. A. S. i., iii. 539. [2] *Vide* ch. xii. [3] *Vide* ch. ix
[4] Vol. i. 631. See also Sir A. Johnson, T. R. A. S. : Gildemeister, Scrip. Arab. pp. 3--7, and chap. on Adam's Peak.

settlement in India being at Kaiłpatam, or Kayal, near Cape Comorin, still regarded as the fatherland of the Moors in India. (*Vide* ch. x).

The "Tohfut-ul-Mujahidun," translated by Lieutenant Rawlinson, says that Jews and Christians had found their way into Malabar before the Mahometans arrived, and makes the date of their settlement A.D. 822, when large grants of land were made to them by a Malabar king.

The Dutch, who hated the Moors more than the Portuguese did, maintained that they were only Moslems in religion, being descended from a low Malabar caste, converted in recent times to Islam, through intercourse with the Arabians of the Red Sea, and that their appearance in the island was not a century earlier than the Portuguese.[1]

The term "Moor" may be traced to the Spanish Moro, or Italian Mori, corruptions of Mauri or Mauritania, on the African shores of the Mediterranean, the old name being partly retained in the modern Morocco. The inhabitants call themselves Moghribins, and their country Mogrib. Formerly in Europe Mahometans were called Saracens or Moors, without distinction of race or country, and the latter term was universally applied to those in India by the Portuguese. The Ceylon Moors of the present day are not pure Arabs, but a mixed race formed by intermarriage with other natives in the island, and are all Shafees, one of the minor sects of Sonnees. They use Arabic in their ritual, but their vernacular is Tamil mixed with Arabic words, and their religious books are in the same language, except the Koran, of which they have an abridgment written by Umbela, in the twelfth century They have also translations in Arabic of ancient Greek and Roman authors, Plato, Galen, Aristotle, Euclid, and Ptolemy Albertus Fabricius, in his "Biblio. Græc." (i. 862), refers to Arabian translations of Hippo and Galen, dated A.D 847

There is reason to suppose the first colonists were Sheahs, or a section of them, as the Carmathians, who took refuge in Ceylon, when Mahomed of Ghuznee captured Moultan, belonged to this sect, which would account for the Khalif of Bagdad,

[1] Van Goens in Valentyn, xv 214.

in the tenth century, sending a learned muftie to convert them.

The Sheahs and Sonnees are the two great sects into which Islam is divided; their division dates from the death of Mahomed, when one party of his followers chose Abu-Bekr, his father-in-law, for Khalif, while the other adhered to the claim of Ali, his son-in-law. The former, or Sheahs, who claim to be the only orthodox Mussulmans, comprise the Turks, the Moors of Barbary and Africa; the latter include the Persians, the greater part of the Arabs, and the majority of the Indian Mahometans. The two sects hate each other with a deadly cordiality, and have been fighting more or less ever since Mahomed's death. The Turks say there is some chance of a Christian going to heaven, but none for a Persian. In India the Sheahs annually celebrate with fanatical orgies the murder of Ali and his two sons.

Their funerals are very strange and remarkable as one sees them on the roads about Colombo. The dead body, dressed as in life, is placed reclining on a rude handbarrow carried on the shoulders of several men; there is a canopy made of branches of trees over the head, and at the feet is placed a small pitcher of water, a little boiled rice, and some fruit in an earthenware dish; two men in front of the procession armed with sticks perform a sham fight, the one nearest the body driving the other before him; several men follow the bearers, the whole running as fast as they can, singing and shouting at the same time with loud voices.

The Chinese, according to Abu-Zaid, as well as the Arabs of the ninth century, placed food near the dead, because it was thought they continued to eat and drink.[1] Many of the customs of the Moors resemble those of the Jews. A long account of them by Casie Chitty will be found in the J. R. A. S., vol. iii.

Chetties—or Cornecopolies—are another immigrant race in Ceylon, coming from the Coromandel, and employed as clerks or accountants and collectors of taxes, rents, and moneys, for

[1] "Les Chinois comme chez les Arabes, ne privent pas le mort de sa nourriture ordinaire; on prétend que le mort continue à manger et à boire." Voy. Arabes, p. 36.

which they appear to have a special aptitude The Chetties are a very quiet and orderly people, excessively frugal and penurious in their habits, and great usurers; they seldom have more than one wife; widows never marry again, but the men can; they wear a sort of comboy, with a short white cotton jacket, the breast being bare, and an extraordinary shaped hat. Their ear-rings are very remarkable, being made of gold or silver wire, formed into a circle of such dimensions that it reaches their shoulders, and are strung with beads of various materials. These men are found in the capacity of accountants and collectors of money all over India and the Archipelago.

Chalias—or cinnamon-peelers, are also a distinct caste and race, originally weavers. Sir A. Johnson[1] mentions that he had in his possession a curious grant on copper made by a Sinhalese King 600 years since, to a Mahometan merchant for having brought weavers to Ceylon from India. Barboso, speaking of Malabar in 1512, says, "there is another set of gentiles lower than washermen, whom they call Chalien, who are weavers of cotton cloths."[2] An account of the Chalias by Adrien R. Pasksi, their chief, will be found in the "Asiatic Researches," x. 154.

The Veddahs.—In Chaps. iii. and vii. reasons are given for supposing that the Veddahs, in common with some of the hill-tribes of India, are closely allied to the aborigines of the Archipelago or Australia, and that they are remnants of a race that formerly occupied vast tracts of land in the Indian Ocean, now submerged through geological changes.

There is a strong family resemblance between the Veddahs and many of the Indian hill-tribes, particularly the Catto Coorumbers of Wynaad and those of Cochin in Malabar, described by Captain Fryer, Madras Staff Corps (J. R. A. S., iii. 478). The coast people of the Nicobar islands speak of a "wild tribe of junglemen in the interior with long hair, inhabiting huts or trees, and living on honey, roots, and game, but no European has yet seen these forest people."[3] This description might have been written for the Veddahs some years ago.

[1] Trans. R. A. S. i. 3, 550, also ch. xvi. [2] Sommario, p. 136.
[3] Voy. of the Novara, ii. 83.

The Veddahs are chiefly found in the dense forests of the north-eastern district, and are estimated to number about 2000, being divided into two or three sections—the galla Veddahs, the village Veddahs, and the coast Veddahs; the latter terms are applied to those who live in huts or hamlets made of mud or the bark of trees, occupying an intermediate position between the galla or wild Veddahs and the other inhabitants, and are not a genuine but a mixed race, from intermarriage with the Siṉhalese, among whom they live, joining the fishermen of the eastern coast in their labours; they also manufacture a few rude articles in the shape of mats, baskets, &c., and speak a corrupt dialect of Siṉhalese, and the coast Veddahs know something of the Tamil. There has been a good deal of intermarriage among all of them with Siṉhalese, so that there are now very few genuine wild Veddahs.

The village Veddahs are generally strong men, though of low stature, and not much subject to disease, and very superior to the wild Veddahs in figure.

The chief peculiarity of the genuine wild Veddah used to be an extraordinary unwillingness to allow a stranger to get near them, especially Europeans. A sportsman on one occasion surprised two in the jungle near Newera Ellia who were engaged in drying rats over the smoke of a fire in a rude shed, but the moment they saw him they ran off and disappeared in an instant among the underwood. Visiting the place a few days afterwards, he found the rats had been taken away in the interval.

When induced to come or when brought perforce by the head men of the district before official persons who wish to see them, "they appear uneasy and full of apprehension, standing with heads bent down, casting side-long looks from restless eyes, apparently watching for an opportunity to escape to the forest." Sir E. Tennent, from whom this is taken, expressed a doubt that the party brought before him were wild Veddahs, but only some from the villages. "Although active and sinewy their appearance is miserable in the extreme, having ill-shaped limbs and large heads covered with black hair, and beards which never see a comb, wide nostrils and large jaws, with

projecting mouths and teeth; the women are as ugly and ill-shaped as the men, while their children are scarcely human, being nearly all head and stomach; a small patch of cotton cloth on the men and a larger piece round the women is their only dress."

They do not make dwellings in trees, as so often stated, although they occasionally resort to temporary stages among the branches,[1] and, like the Australians, wander through the jungles, seldom staying more than a few days in one place, usually taking shelter in caves, hence probably the term "galla" or rock Veddah, and subsist chiefly on venison and wild honey, but when this food is scarce eat rats, monkeys, or any carrion, also pounded dead wood and bark of trees mixed with honey. The diet of the Australian aboriginal is very similar, for although he prefers kangaroo and pigeon, he will eat any reptile that comes in his way.

It has been generally supposed that the wild Veddahs have no language, "expressing themselves by guttural sounds, signs, and grimaces." D'Alwis, in his "Sidath Sangara" says, "they have a language which resembles Siṅhalese, but very unintelligible, and often fail to make themselves understood." Mr. Turnour suggested that the language of the Veddahs is the ancient Pali, alluded to in the "Mahawanso."

They obtain a light by rapidly twirling in their hands a long pointed piece of dry wood in a hole made in another piece, held on the ground with their feet, throwing in little bits of dry leaves as tinder. These wild people consider themselves highly favoured, and are very happy in their way; they have no grinding toil, are free from the curses of our so-called civilization, and do not care for money, which they refuse to take, obtaining all they require—salt, hatchets, arrow-heads, chatties, and cotton cloths—from the Moors by barter, who take their ivory, beeswax, elk horns, and deer-flesh in exchange.

It is rather opposed to the idea that the Veddahs were con-

[1] Some of the wild tribes of Borneo, the Guarons in the Delta of the Oronoco, and aborigines in Venezuela, dwell in habitations formed among palm trees; but these are what are called lake dwellings, being over water or swamps.—Wood's Wild Races, ii. ; Humboldt. Narrat ch. xxv.

nected with the Australians, "that they have no knowledge of the boomerang, their weapons being an axe and a bow." Ribeyro (p. 179). And Captain Percival describes a singular manner of obtaining arrow-heads practised by them formerly. Not being able to make them themselves, they went at night with some arrow-shafts and a piece of venison, honey, or bees-wax, to the nearest village which contained a blacksmith, and hung them up outside his door; the smith understanding what they wished to have done, taking the goods as payment, made the arrow-heads and left them in the same place, where they remained until the Veddahs took them at night.

The accounts that have been given about their shooting arrows into the soles of elephants' feet as the animals lift their legs in walking, is incorrect; they shoot them through the body, and always manage to get within a few feet of the animal before they let the arrow fly, and as their bows are very powerful, do not fail to penetrate at a short distance. In drawing the bow, they hold it in the right hand and pull the string with the left.

The most interesting account of the Veddahs is that given by Dr. Lamprey, of the 15th Regiment, in the "Natural History Review" for July, 1856. He obtained his information of their ways and manners from one who was confined in Wallicodde jail for murder. This man spoke Singhalese, having been some time in prison: "he was a young man five feet three inches high, of a dark brown complexion, with long soft glossy black hair; the upper part of his body was stout, with a protruding abdomen, partly caused by want of exercise; the lower part of his figure was quite out of proportion to the upper, with bowed tibias, usual in all wild races; the space between the big and first toe was wide, and he habitually used his feet for picking up things off the ground; his arms and hands were small but well made, and the fingers short; the face was small, with a dull, stupid look, narrow forehead, but not retreating, aquiline nose and wide nostrils; the eyes were dark brown, not deep set. The lobe of his ear had a large triangular hole in it, made, he said, by his mother when a child with a stick, as was the custom of his people. Neither he nor any of them had any names

Their mode of obtaining a wife is to make a present of deer's flesh or honey to a girl's parents, and if they are willing, she goes with the man without any ceremony, and if he does not like her after a time he takes her back to her father. Their chief food is deer's flesh roasted on sticks over a fire, or boiled in a chattie if they can get one, but are very often in great want of food. Deer's flesh is preserved by being cut in pieces, placed on a wooden frame, and dried over a fire, then soaked in honey, packed in the bark of a tree, and hung on a branch or placed in the hollows of trees, and the aperture closed with mud. This man never knew of these stores being stolen by other parties of Veddahs, nor were they addicted to stealing from each other; if such a thing happened, they would be summarily dealt with. They all have a habit of chewing barks of trees. Their habitations are made of a few branches interwoven into a kind of hurdle and placed against a tree. When in a district where elephants are numerous, they resort to the trees, and in very wet weather take refuge in caves among rocks. Although some wear calico, their usual dress is a piece of sack tree bark (*Antiaris saccidora*), prepared for wearing by being first well soaked in water, and then beaten with stones until it becomes soft and pliable; pieces of it are sewn together with fibres of jungle plant into a garment about a yard square, which they hang round their loins." In Tahiti, common people also make clothing from the bark of one of the *Artocarpaceæ*, prepared in the same manner.

"Their bows are rather more than six feet long; some are made by themselves, and others, along with arrow-heads, obtained from the Moors by barter; the arrows are two feet long, the lance-shaped head being three inches long and half an inch wide."

Dr. Lamprey obtained a bow and some arrows, "and induced the imprisoned Veddah to show his skill at a target sixty yards off, but he turned out an indifferent marksman. At this he seemed much depressed, and said he was out of practice; he had in the jungle killed from three to six deer in a day, and had in his time killed two elephants in the manner already related. Their axe-heads are four inches long, with a cutting

edge of two and a half inches, fixed to a handle three feet long. The axe-head is the same shape as the old Irish Celtic axe found in museums."

"Their chief diseases are intermittent fever and dysentery, proceeding from wet, and bad food. Their cure for fever is very simple and good—the patient is laid in a cool place and covered with large leaves, being supplied with plenty of cold water to drink, and given an infusion made from wild mango leaves and those of some other trees pounded between stones; besides their own remedies they occasionally obtain medicines from traders. If they die, a hole is scraped with a stick, and the body barely covered with earth; sometimes they are merely covered with leaves."

Mr. Green, the Governor of Wallicodde jail, reports of his prisoner, "that he was dull in learning to be a carpenter when put into the shop attached to the prison, but had learnt part of the Siṉhalese alphabet and showed some capacity for arithmetic. When asked to tell the age of his children, he held his hand at different distances from the ground to indicate their height; when asked the time of day, he pointed to the sun in the sky. He had no idea of a soul, and could see no difference between himself and wild animals in the jungle; did not know who made the world, but supposed somebody must have made it; had heard his people talk about 'Walley-hamy,' but did not know if he was good or evil. His people thought themselves very happy, and had no desire or envy for the dress or better position of other Siṉhalese."

At his trial, an account of which was given in the "Lanka-Nidhana," (Treasure of Ceylon), a native publication, he admitted he had killed the man, another Veddah, from fear of his magic and charms,[1] as he had already made away with two of his dogs, and placed a "devil's offering" in his "compound," which was to settle himself. One Veddah, a witness against him, on being asked who was Buddha, replied he had never seen him, and expressed displeasure at seeing a Buddhist priest

[1] It is not many years since a countryman in Dorsetshire was tried for either killing or trying to kill an old woman, because he said she "hag-rode" or bewitched him.

with a quantity of useless robes about him. He called the priest "Capoowa," interpreted to mean "God's priest," which appears inconsistent with their having no idea of a god. Dr. Lamprey ends his account by pointing out an analogy between the skull of a Veddah, and those of the "Fir-bolgs," the ancient inhabitants of Ireland, which are found in museums. So far from being savages, the Veddahs are mild and inoffensive. Mr. Atherton, the Government agent of the North-Eastern district, informed Sir E. Tennent that grave crime was rare, and murder unknown, and that they were kind and affectionate to each other. For some years past efforts have been made to induce them to build huts and cultivate plots of ground, which is said to have been partly successful. Although some returned to their wild habits of life, others did not, and a great deal of their former timidity is disappearing, coming to villages to barter their goods. Missionaries have also been very active among them, and those in the villages, but the said missionaries would be much better and more usefully employed at home in reclaiming the worse than wild beasts, in human shape, among ourselves. Veddahs do not exhibit any of the brutal drunken ruffianism of the civilized savages who infest our towns; bite people's noses off, or kick their wives to death, and are by far the most civilized of the two.

The Rev. J. Gilling, in the Journal of the Ceylon Asiatic Society, gives an account of the village Veddahs, and those among the wild ones who were induced to adopt a settled life, and the result of the missionary efforts, which do not appear to have been very successful. He says their religion is devil worship, and nearly all those he baptized returned in a short time to their former habits and life. They know nothing of heaven or hell, or any kind of future existence, but have a sort of belief in a supreme being, whom they do not fear, and are in great dread of evil demons. It was found difficult to keep them from returning to their wild life in the jungle, which they preferred to cultivation. One of them told the missionary "he did not want money, books, or learning, and would rather have an axe."

The missionary says "murder was formerly very common

among them, but had decreased latterly," which does not agree with Mr. Atherton's statement, who ought to be the best informed on this point.

Rodillas.—An outcast race called Rodillas, or Rhodiyas, are found located in Saffragam, Doombera, and Kadugannawa. The origin of these people, and the horror with which they are regarded by other natives, is involved in obscurity, the only light thrown on it being a statement in Knox,[1] who calls them "Dodda Veddahs," which signifies hunters, being descended according to tradition, from hunters who were employed to furnish venison for the king's table at some remote period, but having once surreptitiously substituted human flesh instead of venison, the king liked it so much he ordered more of the same sort, in ignorance of what he was eating. At last the king's barber found it out, and told him ; the king in his indignation forthwith degraded and made outcasts of them and their descendants from generation to generation.

All sorts of penalties were imposed on them during the native rule. They were not allowed to pass a ferry ; draw water at a well ; learn a trade ; enter a village, a court of justice, or a temple. A solitary instance is recorded of a Buddhist priest having preached to them, for which he incurred the king's displeasure, but replied that religion should be common to all. They were not allowed to make huts with more than two sides, which were placed so as to form an angle, or use a pingo loaded at both ends, and were obliged to get off the road when any other native passed. When they became too numerous they were thinned by shooting a certain number in each hamlet. The greatest disgrace that could befall a high-caste woman was to be handed over to a Rodilla for his wife, when he was required as a ceremonial to take betel from his mouth and place it in hers, an indelible disgrace, never to be eradicated.[2] The only privileges they enjoyed were permission to beg outside enclosures, and an exemption from paying taxes and performing service.

In such horror were they held, that Dr. Davy mentions, "some

[1] Relation, p. 70.

[2] Rev. Mr. Hardy in the "Friend," ii. 15, quoted by Sir E. Tennent, ii. 189.

native police Vidahans, who were told to capture some of them, accused of murder, declined to touch them, but offered to shoot them."

Since the British occupation of Kandy, their condition has been much improved, but the prejudice against them still continues. Their cattle, poultry, and everything they possess are considered degraded. Centuries of oppression have rendered them imbecile and degraded. They are reputed thieves, and dirty in their habits, eating dead bullocks found on the roadside, and all kinds of vermin. Marco Polo mentions that the Govis or Pariahs of Southern India would not venture to kill a cow, but if they found one dead they would eat it.

Although so degraded, they are physically a finer race than the other Siṉhalese, particularly the women, who are remarkable for their good figures, little encumbered with clothing, being naked to the waist, and ramble about the country, gipsy like, telling fortunes, and attracting attention by twirling a brass plate with great dexterity on one finger, held high in the air. They have a very bad reputation for virtue, their personal attractions overcoming the prejudice on the part of the Siṉhalese gallants entertained against the other members of their race.

Rodillas are mentioned in the "Rajavali," B.C. 204, and the "Mahawanso" speaks of a village of outcasts of Hindu origin in the island A. D. 437, which may refer to them. They do not appear to be in any way connected with the Veddahs. Some suppose them to be an aboriginal race, and are said to speak a dialect unlike Siṉhalese. Sir E. Tennent points out the remarkable resemblance between their treatment and that of the ancient outcast races of France and Spain, the Cagieux of Bretagne and the Cagots of the Pyrenees, who were branded on the shoulders with a pied d'oye in red. (*Vide* Michel, His. des Cagots.)

Fishermen and their Canoes.—The Parawas, or fishermen, of Ceylon form a very distinct class or caste in the island, and in common with the fishermen of many other countries are Catholic Christians. The tendency among the fishermen of so many and widely scattered races to embrace the Catholic

religion, which they all retain with much tenacity, is a curious fact. The Parawas of Cape Comorin and the fishermen of Southern Ceylon were the first converts of the Portuguese missionaries in India, and those of Manaar invited St. Francis Xavier, from Tutocorin, among them in 1544. According to Casie Chitty (J. R. A. S. iv. 131), the Parawas of Ceylon and Southern India are the same race, and a very ancient seafaring tribe, resembling the Tamils, some shaving their heads. They are divided into thirteen sections, such as net-fishers, rod-fishers, boat-fishers, rock-fishers, etc. Some make boats, others fishing gear, and one section are carpenters. Their nets and lines are mostly made of cotton, and steeped in the juice of the fruit of the *Diospyros glutinosa*, which tans them. The Chinese use the juice of the *Uncaria Gambir*. Cotton fishing nets have been recently used in England and France, being lighter and better than those made of hemp. Their hooks are made of cast brass.

The only boats they use are canoes about twenty feet long, twenty inches wide, and thirty-six inches high. The body or hull of the canoe is made from the trunk of a tree, hollowed out; the top, sides, and ends are planks, sewn on to it with coir twine; the ends slant forward at a considerable angle, but the sides are nearly perpendicular, and narrower than the trunk part, being just wide enough for a man to sit in. They have a solid outrigger, a few feet shorter than the canoe, fixed by two long curved poles, or bamboos, projecting about eighteen feet from one side, and carry a very large lug sail, hoisted on two poles, which are lowered with the sail. The outrigger is always to windward when sailing; they are steered with short flat paddles.

Canoes with outriggers are found throughout the Coral Islands of the Pacific and the Malay Archipelago, but the shape of most of them is different from that of Ceylon, which is unrivalled for its lightness and picturesque form, skipping over the waves it barely seems to touch with surprising velocity, often exceeding ten miles an hour, and venture far out to sea, being the first to welcome the stranger on the coast, coming alongside ships, offering for sale fish and fruits.

The seer, boneto, and other swift fish are caught with a line

and hook, after the manner of mackerel, when the canoes are sailing at their highest speed over the waves. They also practise bottom and night fishing, when they occasionally use a torch to attract the fish, a custom which is observed among the fishermen of the Mediterranean.

The seas round Ceylon are very prolific of fish, and their capture so facile that the Portuguese derived a revenue from them, levying a tax in kind of one-fourth on all fish brought to market which were sold by auction. The Portuguese performed the part of police, settling disputes, and protecting the fishermen in their rights. The Dutch followed the same system, finding it worked to their profit and the public benefit, in producing an abundance of cheap fish in the markets; but the English when they gained possession of the island, with the absurd plan they generally follow of applying English customs and laws to Asiatics and other races, whose manners, ways, and ideas are totally different from theirs, introduced a new-fangled license on each boat.

Disliking change, the fishermen set themselves against it Although it was pointed out to them it was for their benefit, they preferred paying in kind; their fathers had done so, why should not they? And objected to parting with their money for a license, which many would not take out, and left off fishing This plan was tried three times by the Government without success, and finally abandoned in 1827, when the old tax in kind was restored, amid the applause of the fishermen.

Not convinced by the failure of their plans, the Government in 1837 reduced the tax to one-tenth, and in 1840 abolished it altogether, when, as any person acquainted with Asiatics could have foretold, each reduction, instead of increasing the quantity of fish caught, diminished it, while the price rose more than double, and fish was often scarce, although the seas were swarming with them. The reason was obvious; the fishermen found out that they got as much money as formerly by catching less, for the price was double, and lived at their ease, not having the stimulus to exertion which existed under the old system, when they were obliged to catch more than they wanted to pay the tax. Thus the Government lost a revenue,

and the public were injured. This is only a specimen, and a very good one too, of the experimental legislation so much in vogue in our days, and which produces equally satisfactory results, whenever it is tried.

Sir E. Tennent has satisfactorily shown the injurious results of the abolition of this tax, and has pointed out, as a curious coincidence, that the same effect followed a similar experiment at Lisbon, where there was formerly a tax on fish, producing a good revenue. In 1830, when it was abolished, the supply diminished, but in 1843, the former regulation was re-established with good effect. The increased value of the fish caught in Ceylon, after the abolition of the tax, did not proceed from any increase of the quantity, but because the price was nearly doubled. The fish tax of twenty-five per cent., in 1833, produced £7,389 per annum.

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